# Medicaid Value Management (MVM)

*Realizing the fiscal value of quality care.*

## Dual Eligible: Medicare and Medicaid Eligible

**3rd Qtr, SFY 12**

MVM Checklist - State Fiscal Year 2012, 3rd Quarter: Medicare/Medicaid Dual Eligibles.

| | |
|---|---|
| ✓ **Selected Performance Indicator** | Analysis of Iowa Medicaid's dual eligible population. |

**Rationale for PI selection**: Dual eligible members represent 15 percent of Iowa Medicaid's census and account for 41 percent of the expenditures. To date, the health status of this important group is relatively unmanaged. Director Vermeer requested an analysis of this population and their medical needs.

**Numerator**: Dual Eligible Population

**Denominator**: Iowa Medicaid Population

| | |
|---|---|
| ✓ **Population/Demographics** | |
| ✓Age | All Ages |
| ✓Gender | Both Genders |
| ✓County of Residence | All Counties |
| ✓ **Program Variables** | |
| ☐ Coverage Group | N/A |
| ☐ Aid Type | N/A |
| ☐ Service Area | N/A |
| ☐ Waiver Type | N/A |
| ✓ **Provider Data** | |
| ☐ Provider Type | N/A |
| ☐ Provider Name | N/A |
| ✓ **Claims Specific Data** | |
| ✓Diagnosis Code/Description | N/A |
| ✓Paid Date/Date of Visit | N/A |
| ✓Claim Type (Inpt, Outpt, etc.) | N/A |
| ✓Procedure Code/Description | N/A |
| ✓Cost | N/A |
| ✓Exclusions | Members without Medicare Coverage |

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**Overview:**

**History of Medicare**:

The Medicare and Medicaid programs were signed into law on July 30, 1965. President Lyndon B. Johnson is pictured at the signing ceremony in Independence, Missouri at the Truman Library.

*President Johnson signing the Medicare program into law, July 30, 1965. Shown with the President (on the right in the photo) are (left to right) Mrs. Johnson; former President Harry Truman; Vice-President Hubert Humphrey; and Mrs. Truman. Photo courtesy of LBJ Presidential Library.* [1]

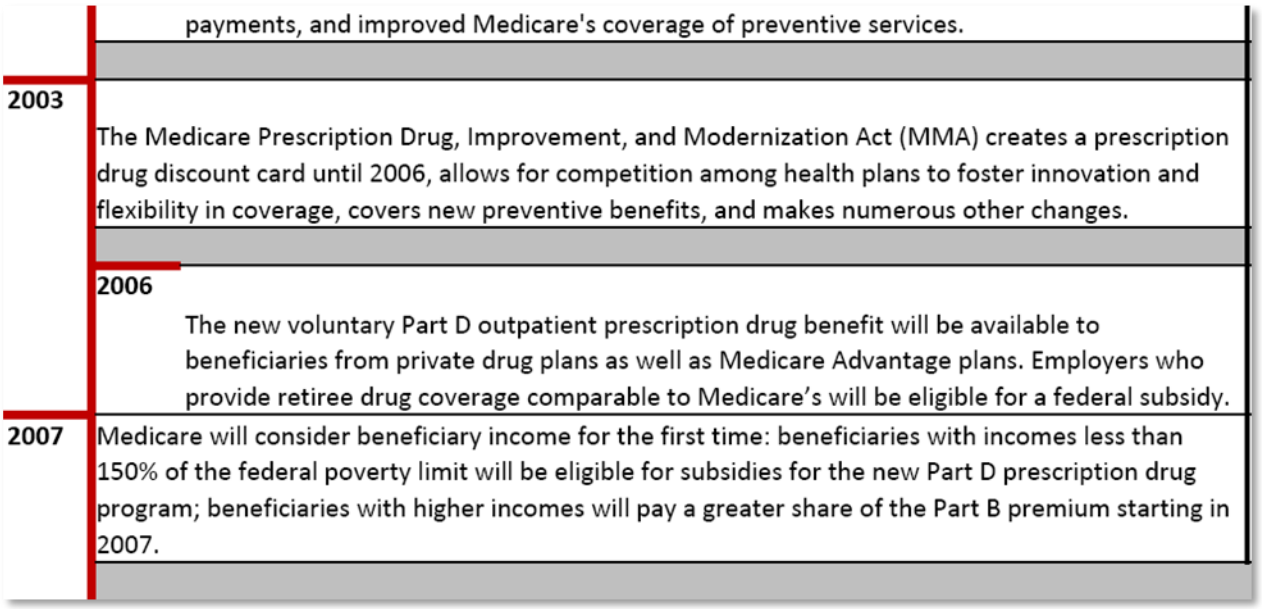
Former President Truman is seated beside him. President Johnson held the ceremony there to honor President Truman's leadership on health insurance, which he proposed in 1945. [2]

One of the most significant legislative changes to Medicare, the Medicare Modernization Act or MMA, was signed into law by President George W. Bush, on December 8, 2003. This legislation added an outpatient prescription drug benefit to Medicare and made many other important changes.

Since 1965, a number of changes have been made to the Centers for Medicare and Medicaid (CMS) programs. Moreover, the agencies charged with implementing the programs have changed as well. The time table below outlines the history of CMS and some of the important events for this program. [3]

| | |
|---|---|
| 1965 | Medicare and Medicaid were enacted as Title XVIII and XIX of the Social Security Act. |
| 1966 | Medicare was implemented and more than 19 million individuals enrolled on July 1. |
| 1967 | An Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) comprehensive health services benefit for all Medicaid children under age 21 was established. |
| | |
| 1972 | Medicare eligibility was extended to individuals under age 65 with long-term disabilities and to individuals with end-stage renal disease (ESRD). |
| 1973 | The HMO Act provided for start-up grants and loans for the development of health maintenance organizations (HMOs) |
| | |
| 1977 | The Health Care Financing Administration (HCFA) was established to administer the Medicare and Medicaid programs. |
| | |
| 1980 | Coverage of Medicare home health services was broadened. Medicare supplemental insurance, also called "Medigap," was brought under Federal oversight. |
| 1981 | Freedom of choice waivers (1915b) and home and community-based care waivers (1915c) were established in Medicaid. |
| | states were required to provide additional payments to hospitals treating a disproportionate share of low-income patients |
| 1982 | The Tax Equity and Fiscal Responsibility Act made it easier and more attractive for health maintenance organizations to contract with the Medicare program. |
| 1983 | An inpatient acute hospital prospective payment system for the Medicare program, based on patients' diagnoses, was adopted to replace cost-based payments. |
| | |
| 1985 | The Emergency Medical Treatment and Labor Act (EMTALA) required hospitals participating in Medicare that operated active emergency rooms to provide appropriate medical screenings and stabilizing treatments. |
| 1986 | Medicaid coverage for pregnant women and infants (up to 1 year of age) to 100 percent of the Federal Poverty Level (FPL) was established as a state option. |
| 1987 | The Omnibus Budget Reconciliation Act of 1987 (OBRA87) strengthened the protections for residents of nursing homes. |
| 1988 | The Medicare Catastrophic Coverage Act improved hospital and skilled nursing facility benefits, covered mammography, and included an outpatient prescription drug benefit and a cap on patient liability. |
| | Medicaid coverage for pregnant women and infants to 100 percent FPL was mandated. |
| | Special eligibility rules were established for institutionalized persons whose spouses remained in the community to prevent "spousal impoverishment". |
| | Qualified Medicare Beneficiary (QMBs) program was established to pay Medicare premiums and cost sharing charges for beneficiaries with incomes and resources below established thresholds. |
| 1989 | The Medicare Catastrophic Coverage Act of 1988 was repealed after higher-income elderly protested new premiums. |
| | A new Medicare fee schedule for physician and other professional services, a resource-based relative |

| | | |
|---|---|---|
| | value scale, replaced charge-based payments. | |
| | Medicaid coverage of pregnant women and children under age 6 to 133 percent FPL was mandated; expanded EPSDT requirements were established. | |
| | **1990** | Phased in Medicaid coverage of children ages 6 through 18 under 100 percent FPL was established |
| | | Medicaid prescription drug rebate program was established |
| | | Specified Low-Income Medicare beneficiary eligibility group was established (SLMBs) for Medicaid programs to pay Medicare premiums for beneficiaries with incomes at least 100 percent but not more than 120 percent of the FPL and limited financial resources. |
| **1991** | Medicaid Disproportionate Share Hospital (DSH) spending controls were established, and provider-specific taxes and donations to states were capped. | |
| | | |
| | **1996** | Welfare Reform—The Aid to Families with Dependent Children (AFDC) entitlement program was replaced by the Temporary Assistance for Needy Families (TANF) block grant |
| | | Enrollment/termination of Medicaid was no longer automatic with receipt/loss of welfare cash assistance. |
| | | The Health Insurance Portability and Accountability Act of 1996 (HIPAA) had several provisions. |
| | | First, it amended the Public Health Service Act, the Employee Retirement Income Security Act of 1974 (ERISA), and the Internal Revenue Code of 1986 to provide for new Federal rules improving continuity or "portability" of coverage in the large group, small group and individual health insurance markets. |
| | | Second, it created the Medicare Integrity Program which dedicated funding to program integrity activities and allowed CMS to competitively contract for program integrity work. |
| | | Third, it created national administrative simplification standards for electronic health care transactions. Fourth, it required HHS to issue privacy regulations if Congress failed to enact substantive privacy legislation. |
| **1997** | Balanced Budget Act of 1997 (BBA)—State Children's Health Insurance Program (SCHIP) was created; limits on Medicaid payments to disproportionate share hospitals were revised; new Medicaid managed care options and requirements for states were established. | |
| | **1998** | The internet site www.medicare.gov was launched to provide updated information about Medicare. |
| **1999** | The toll-free number, 1-800-MEDICARE (1-800-633-4227), was available nationwide. The first annual Medicare & You handbook was mailed to all Medicare beneficiary households. | |
| | The Ticket to Work and Work Incentives Improvements Act of 1999 (TWWIIA) expanded the availability of Medicare and Medicaid for certain disabled beneficiaries who return to work. | |
| | The Balanced Budget Refinement Act of 1999 (BBRA) increased payments for some Medicare providers and increased the amount of Medicaid DSH funds available to hospitals in certain States and the District of Columbia. Other related legislation improved Medicaid coverage of certain women's health services. | |
| | **2000** | The Benefits Improvement and Protection Act (BIPA) further increased Medicare payments to providers and managed health care organizations, reduced certain Medicare beneficiary co- |




Eligibility:

In addition to meeting the guidelines for Medicaid eligibility, approximately 15 percent of Iowa Medicaid members are also eligible for Medicare. To be eligible for Medicare:

- You or your spouse must have worked for at least 10 years in Medicare-covered employment, and
- Be age 65 or older, and
- Be a citizen or permanent resident of the United States . . .

Or,

- If not age 65, have a disability or end-stage renal disease, that is, permanent kidney failure requiring dialysis or transplant.

There are three factors that contribute to the definition of disability:

- Person with a physical or mental impairment that limits one or more major life activities
- Person with a record of such a physical or mental impairment
- Person who is regarded as having such an impairment

The definition of disability under Social Security, however is different than other programs. "Disability" under Social Security is based on inability to work:

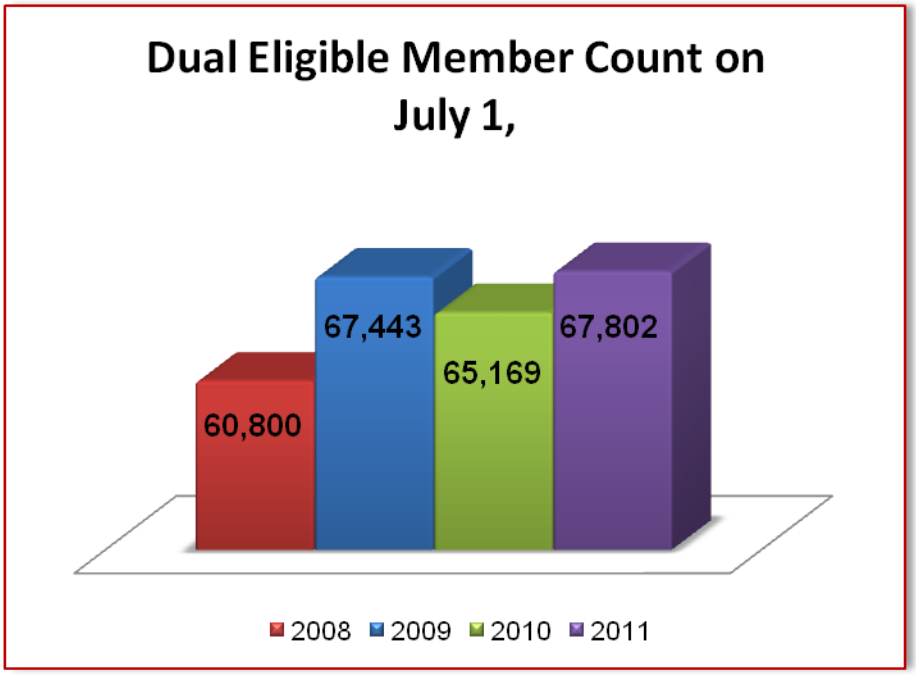
- You cannot do work that you did before, and
- Social Security decides that you cannot adjust to other work because of your medical conditions; and
- Your disability has lasted or is expected to last for at least one year or to result in death.

Medicaid's dual eligible population has unique medical needs and is relatively unmanaged. Iowa's Medicaid program seeks understanding if these special needs in order to effectively prepare for the future.

**Outcome:**

**What Does the Iowa Medicaid Dual Eligible Population Look Like?**

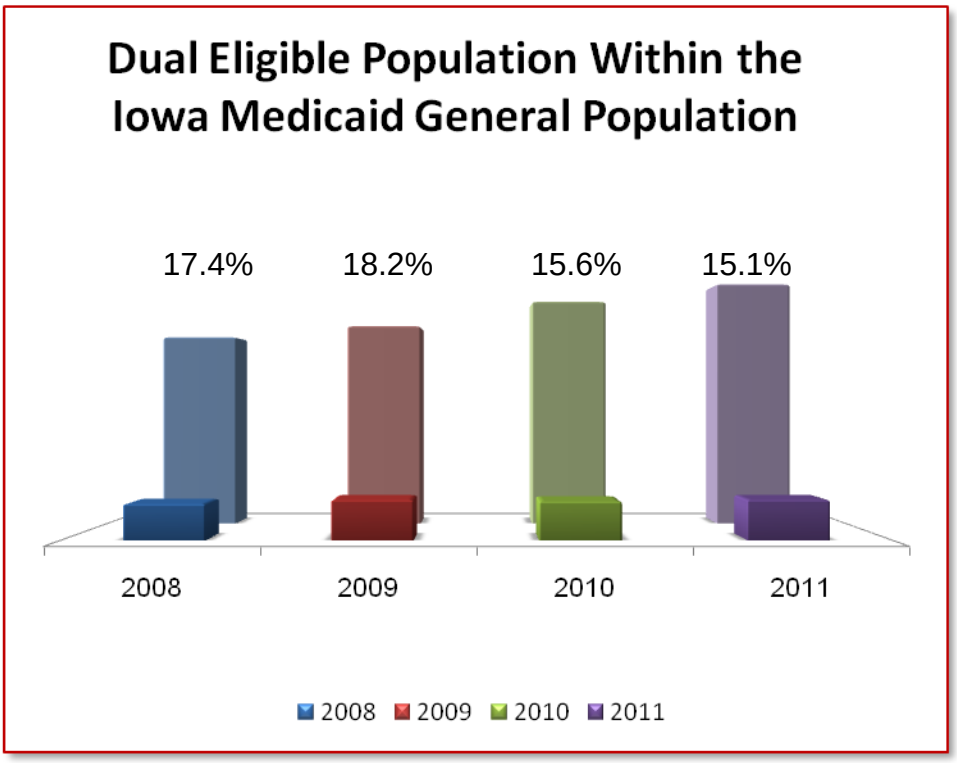
For comparison, the data queries completed for this report used specific target date of July 1 for each respective year; comparisons encompassed years 2008, 2009, 2010 and 2011.




The dual eligible population within Iowa Medicaid grew 10.9 percent from 2008 to 2009 but Medicaid experienced less than a one percent increase from 2009 to 2011.

| Anchor Date | Medicaid Census without Duals | % Change from Previous Year | Dual Eligible Census | % Change from Previous Year | Total Census | % Change from Previous Year |
|---|---|---|---|---|---|---|
| 7/1/2008 | 288,987 | *** | 60,800 | *** | 349,787 | *** |
| 7/1/2009 | 303,331 | 5.0% | 67,443 | 10.9% | 370,774 | 6.0% |
| 7/1/2010 | 351,552 | 15.90% | 65,169 | -3.9% | 416,721 | 12.4% |
| 7/1/2011 | 381,714 | 8.60% | 67,802 | 3.5% | 449,516 | 7.9% |

While the dual eligible population experienced a significant increase in 2009, it has remained fairly stable in the subsequent years. The non-dual eligible population experienced a significant increase in 2010.




The relative proportion of dual eligible members has decreased despite a steady growth in the general Medicaid population.

| Anchor Date | Medicaid Census | Dual Eligible Census | Dual - % of Medicaid Census |
|---|---|---|---|
| 7/1/2008 | 349,787 | 60,800 | 17.4% |
| 7/1/2009 | 370,774 | 67,443 | 18.2% |
| 7/1/2010 | 416,721 | 65,169 | 15.6% |
| 7/1/2011 | 449,516 | 67,802 | 15.1% |

The proportion of dual eligible members may increase in future years as the baby boomer generation began turning 65 years of age in 2011.

| FY | Medicaid Census with ≥ 1 paid claim | % Change from Previous Year | Dual Eligible with ≤ 1 paid claim | % Change from Previous Year |
|---|---|---|---|---|
| 2008 | 426,530 | *** | 79,866 | *** |
| 2009 | 453,395 | 6.3% | 79,490 | -0.5% |
| 2010 | 485,310 | 7.0% | 77,885 | -2.0% |
| 2011 | 509,841 | 5.0% | 75,157 | -3.5% |

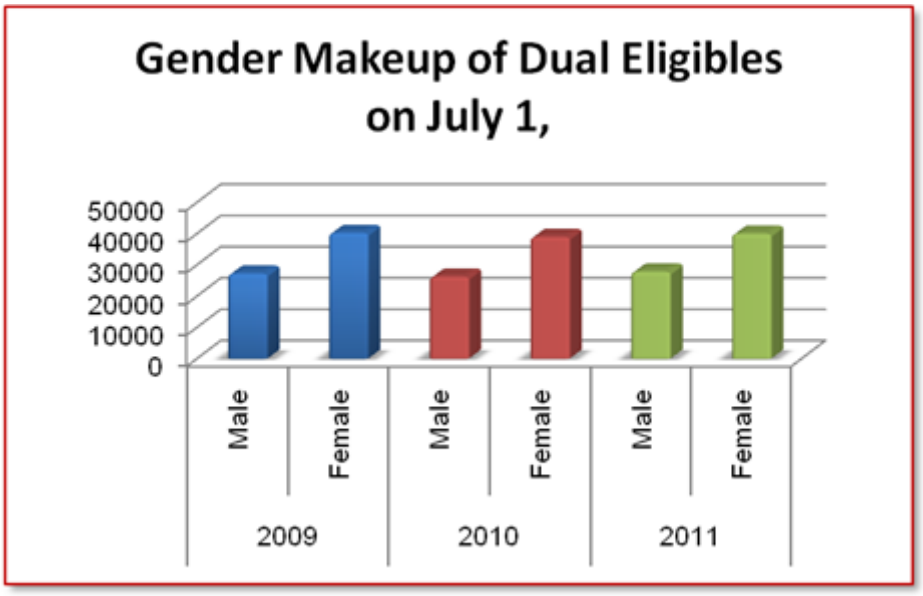
The dual eligible population with at least one paid claim has decreased while the overall number of members with at least one paid claim has increased suggesting that fewer

dual eligible members are moving in and out of the Medicaid population during the course of a year than the overall Medicaid population.

| FY | Medicaid Census with ≥ 1 paid claim % Change from Previous Year | Dual Eligible with ≤ 1 paid claim | Dual - % of Medicaid Census with ≥ 1 paid claim |
|---|---|---|---|
| 2008 | 426,530 | 79,866 | 18.7% |
| 2009 | 453,395 | 79,490 | 17.5% |
| 2010 | 485,310 | 77,885 | 16.0% |
| 2011 | 509,841 | 75,157 | 14.7% |

Similar to the changes in population with at least one paid claim, the relative proportion of duals with at least one paid claim has also decreased.

On July 1, 2009, Iowa Medicaid had 67,443 dual eligible members enrolled, 39,975 of these members were female. Throughout 2010 and 2011, females continued to outnumber their male counterparts as dual eligible enrollees. *




The ratio of females to males within the dual population has remained roughly three to two.

| Age/FY | 0-1 | 2-5 | 6-12 | 13-17 | 18-21 | 22-25 | 26-49 | 50-59 | 60-64 | >65 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 7/1/2009 | 2 | 0 | 6 | 5 | 269 | 1,209 | 18,085 | 12,440 | 5,064 | 30,363 | **67,443** |
| 7/1/2010 | 1 | 3 | 7 | 11 | 284 | 1,209 | 17,110 | 12,464 | 5,178 | 28,902 | **65,169** |
| 7/1/2011 | 2 | 6 | 4 | 15 | 310 | 1,343 | 17,564 | 13,658 | 5,798 | 29,120 | **67,802** |

* The gender was not identified in two of the dual eligible members identified in this query.

| Age/FY | 0-21 | 0-21 % of Total | 22-64 | 22-64 % of Total | >65 | >65 % of Total | Total |
|---|---|---|---|---|---|---|---|
| 7/1/2009 | 282 | 0.42% | 36,798 | 55% | 30,363 | 45% | 67,443 |
| 7/1/2010 | 306 | 0.47% | 35,981 | 55% | 28,902 | 44% | 65,169 |
| 7/1/2011 | 334 | 0.49% | 38,345 | 57% | 29,120 | 43% | 67,802 |

Two views of age distribution are presented above. By July 1, 2011 only 43 percent of Iowa's dual eligible population was above the age of 64. Iowa Medicaid's dual eligible population is becoming younger.

| County | 7/1/2011 Count | % 0f Total |
|---|---|---|
| POLK | 8,488 | 12.52% |
| LINN | 4,295 | 6.33% |
| SCOTT | 3,282 | 4.84% |
| BLACK HAWK | 3,239 | 4.78% |
| WOODBURY | 2,501 | 3.69% |
| DUBUQUE | 2,319 | 3.42% |
| POTTAWATTAMIE | 2,118 | 3.12% |
| JOHNSON | 1,649 | 2.43% |
| CLINTON | 1,565 | 2.31% |
| WAPELLO | 1,498 | 2.21% |
| CERRO GORDO | 1,479 | 2.18% |

Above are the eleven counties with the highest dual eligible population. The next county was significantly lower in dual population.

The change in relative share of dual population by county from 2009 to 20111 has been small. Linn County has seen the greatest change of an increase of 0.24% followed by Polk County at 0.97% and Pottawattamie County at 0.08%.

## Quality Measures and the Iowa Medicaid Dual Eligible Population

The Agency for Healthcare Research and Quality (AHRQ) has developed health care decision making and research tools that can be used by government health care programs. Of these, the Quality Indicators (QIs) are measures of health care data that is available from hospital inpatient administrative data, or claims data. The AHRQ QI modules are an expansion of Healthcare Cost and Utilization Project (HCUP) QIs.[4]

The Preventive Quality Indicators (PQIs) are ambulatory care sensitive conditions that can be identified through hospital admissions. They provide insight regarding outpatient care that could have prevented the hospitalization. Analysis of Iowa Medicaid data compared to PQI benchmarks is valuable as it facilitates the following:

- Identification of opportunities to intervene in health care management

- Ability to review outcomes of preventive care for both acute illness and chronic conditions

In previous PQI analyses for Iowa Medicaid, dual eligible members have been excluded. The following, however, is an application of the PQI data queries to only dual eligible member claims. Most hospitalization costs which are used in this analysis are paid by Medicaid in the form of crossover claims. The PQI analysis for calendar year 2011 is reported in the following table. Detailed results are included in individual PQI measure tables, descriptions and analysis that follow.

**Prevention Quality Indicators (PQI) for Iowa Medicaid Dual Eligible Population**

**TIMEFRAME 01/01/2011 – 12/31/2011**

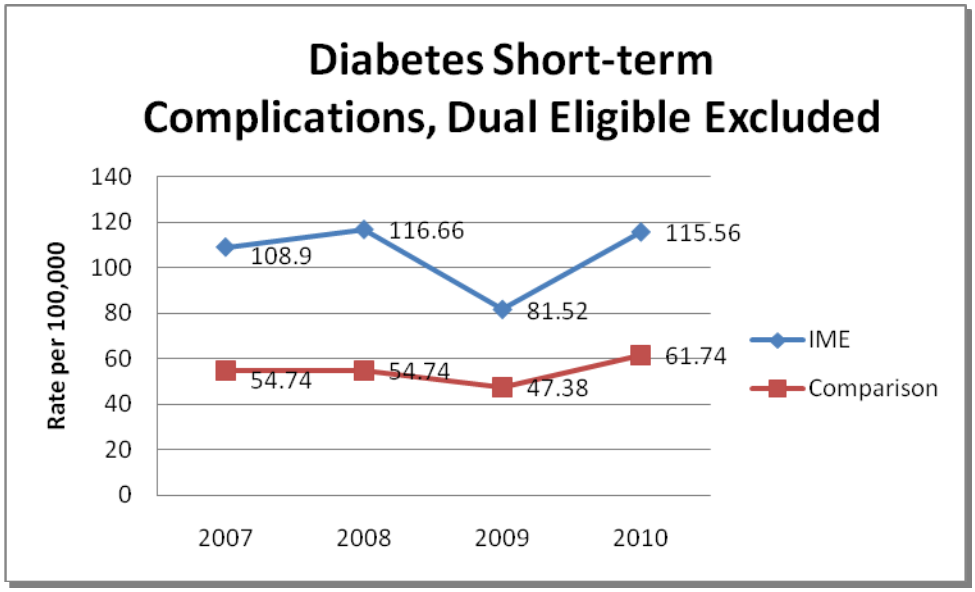
| PQI | IME Numerator | IME Denominator | IME Rate/100,000 | 95% CI IME Indicator | Comparison Rate/100,000 |
|---|---|---|---|---|---|
| Diabetes Short Term Complications | 131 | 115,335 | 13.01 | 6.42 –19.59 | 61.74 |
| Perforated Appendix | 15 | 31 | 48.38 (per 100) | 30.79 – 65.97 | 28.16/100 |
| Diabetes Long Term Complications | 271 | 115,335 | 234.97 | 207.02 – 262.91 | 128.69 |
| COPD | 975 | 115,335 | 845.36 | 792.52 – 898.20 | 578.39 |
| Hypertension | 61 | 115,335 | 52.89 | 39.62 – 66.16 | 62.10 |
| Congestive Heart Failure | 700 | 115,335 | 606.93 | 562.10 – 651.72 | 399.95 |
| Low Birth Weight | 0 | 0 | N/A | N/A | 50/100 |
| Dehydration | 307 | 115,335 | 266.18 | 236.44 – 295.92 | 176.19 |
| Bacterial Pneumonia | 1103 | 115,335 | 956.34 | 900.18 – 1012.51 | 361.62 |
| Urinary Tract Infection | 445 | 115,335 | 385.83 | 350.05 – 421.61 | 206.38 |
| Angina Without Procedure | 23 | 115,335 | 19.94 | 11.79 – 28.09 | 25.03 |
| Diabetes Uncontrolled | 43 | 115,335 | 37.28 | 26.14 – 48.42 | 23.11 |
| Adult Asthma | 21 | 115,335 | 18.21 | 10.42 – 25.99 | 59.77 |
| Lower Extremity Amputation | 40 | 115,335 | 34.68 | 23.94 – 45.43 | 17.53 |
| Overall PQI | 4100 | 115,335 | 3554.86 | 3448.00 – 3661.72 | 1825.36 |
| Acute PQI | 1855 | 115,335 | 1608.36 | 1535.76 – 1680.96 | 744.18 |
| Chronic PQI | 2246 | 115,335 | 1947.37 | 1867.62 – 2027.12 | 1081.22 |

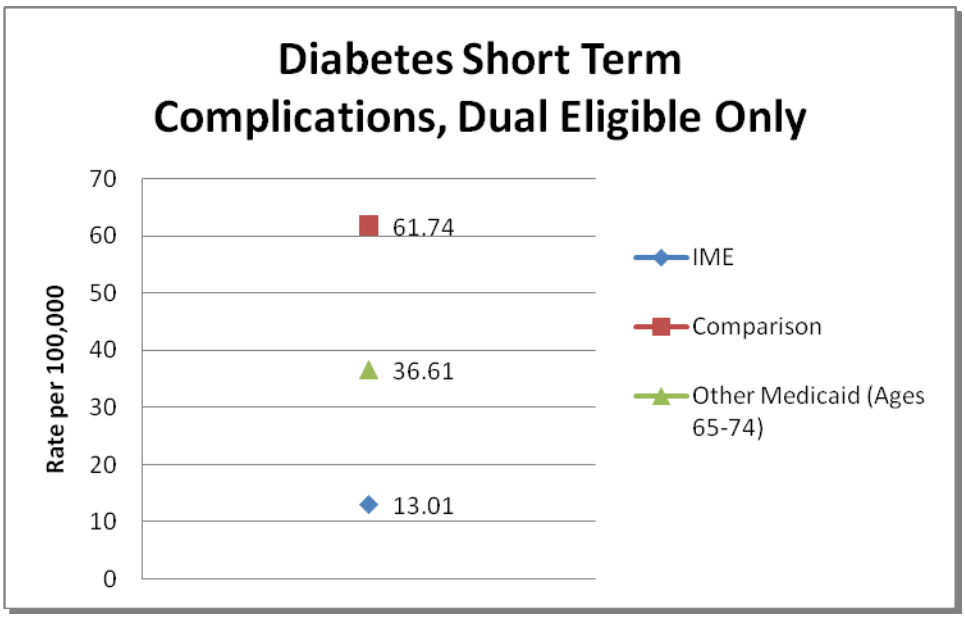
The following PQI descriptions are taken from *AHRQ Quality Indicators: Guide to Prevention Quality Indicators*, Department of Health and Human Services, and Agency for Healthcare Research and Quality, October 2001. Each set of tables below provides first the PQI results of the general Iowa Medicaid population excluding dual eligibles using claims data from 2007 through 2010. The second table in each set reflects PQI application of CY2011 claims data for dual eligible members and provides the comparison of Iowa's dual eligible population to national benchmarks. The national benchmark reflects data reported from all payers in the 2008 Nationwide Inpatient Sample (NIS) published in August 2011.[5] The comparison benchmark also represents

all ages. Comparison is also provided to a benchmark representing Medicaid members ages 65-74, also from the NIS.

Diabetes Short-term Complications Admission Rate (PQI 1)

Short-term complications of diabetes mellitus include diabetic ketoacidosis, hyperosmolarity, and coma. These life-threatening emergencies arise when a patient experiences an excess of glucose (hyperglycemia) or insulin. Short-term diabetic emergencies that arise from the imbalance of glucose and insulin can result from deviations in proper care, misadministration of insulin, or failure to follow a proper diet. (hypoglycemia). Patients may make errors in self-administration of insulin or simply not take their insulin.

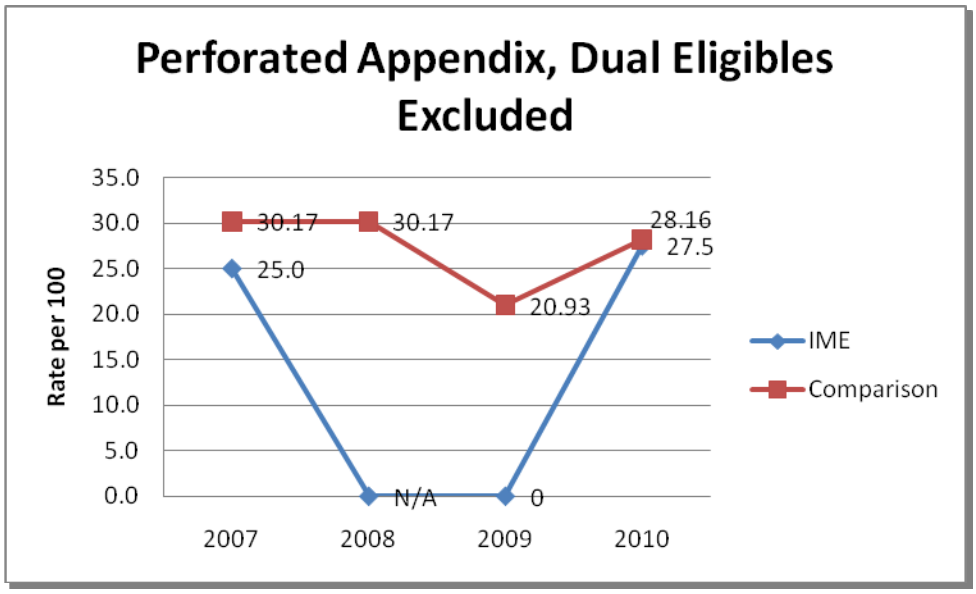


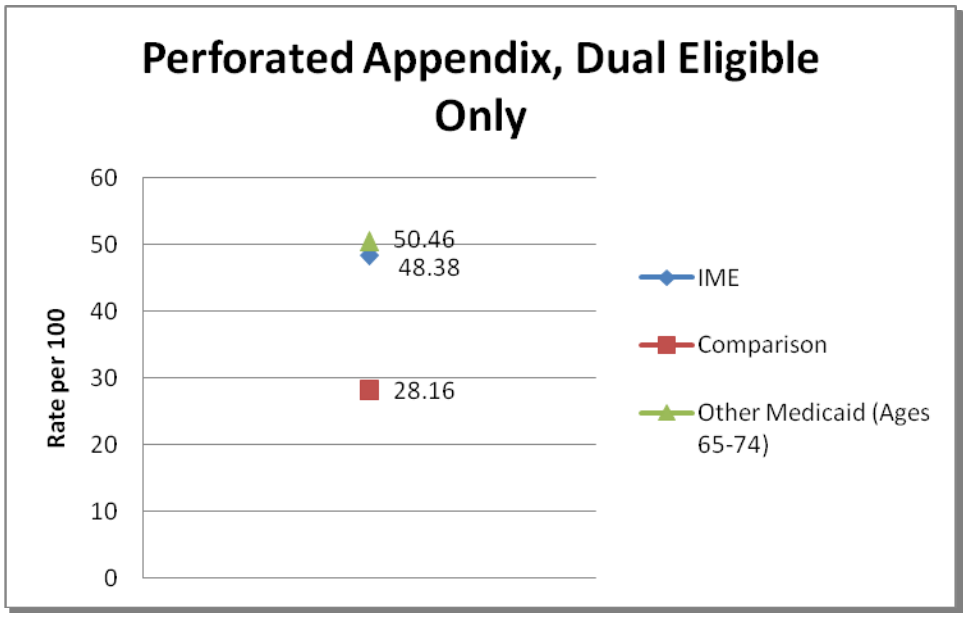



ANALYSIS: While Iowa Medicaid's general population has always exceeded the benchmark, the dual population is much lower than the benchmark and the senior Medicaid population.

Perforated Appendix Admission Rate (PQI 2)

Perforated appendix may occur when appropriate treatment for acute appendicitis is delayed for a number of reasons, including problems with access to care, failure by the patient to interpret symptoms as important, and misdiagnosis and other delays in obtaining surgery. With prompt and appropriate care, acute appendicitis should not progress to perforation or rupture. Timely diagnosis and treatment may reduce the incidence of perforated appendix. The score is obtained by identifying hospital admissions for perforated appendix per 100 admissions for appendicitis.

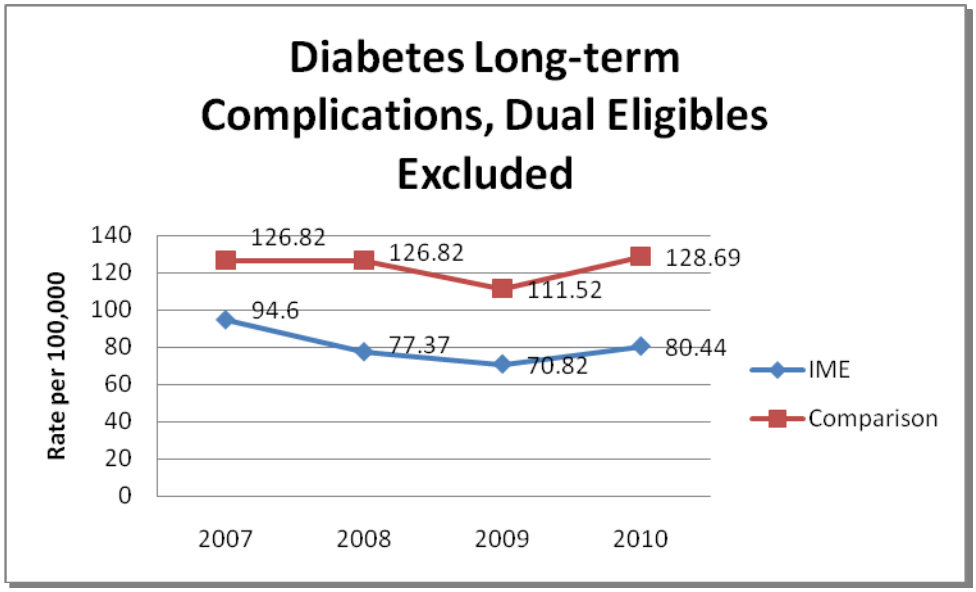


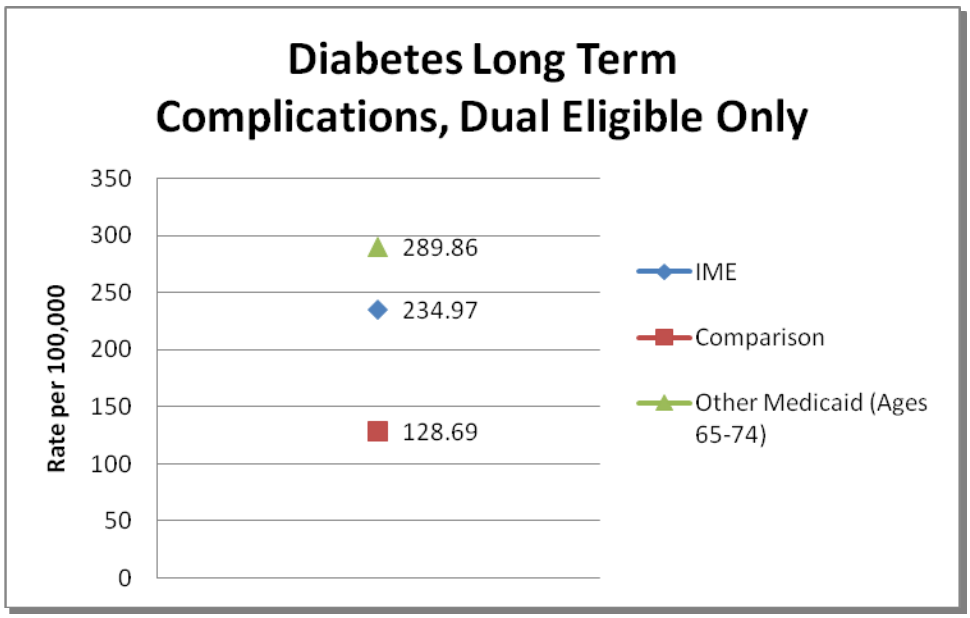



ANALYSIS: In this measure Iowa's dual population is higher than the traditional benchmark, but is in line with the senior Medicaid population. A result higher than the benchmark may indicate a concern with recognition of symptoms or timely care. There were 31 cases identified and approximately half (15) experienced perforation.

Diabetes Long-term Complications Admission Rate (PQI 3)

Long-term complications of diabetes include renal, eye, neurological, and circulatory disorders and occur at some time in the majority of patients with diabetes to some degree. Proper outpatient treatment and adherence to care may reduce the incidence of diabetic long-term complications. Long-term diabetes complications are thought to arise from sustained long-term poor control of diabetes. Intensive treatment programs have been shown to decrease the incidence of long-term complications in both Type 1 and Type 2 diabetes. Adherence to therapy and consistent monitoring of glycemic control (including eye and foot examination and diabetic education) should help to prevent complications but are lacking in the majority of patients served.

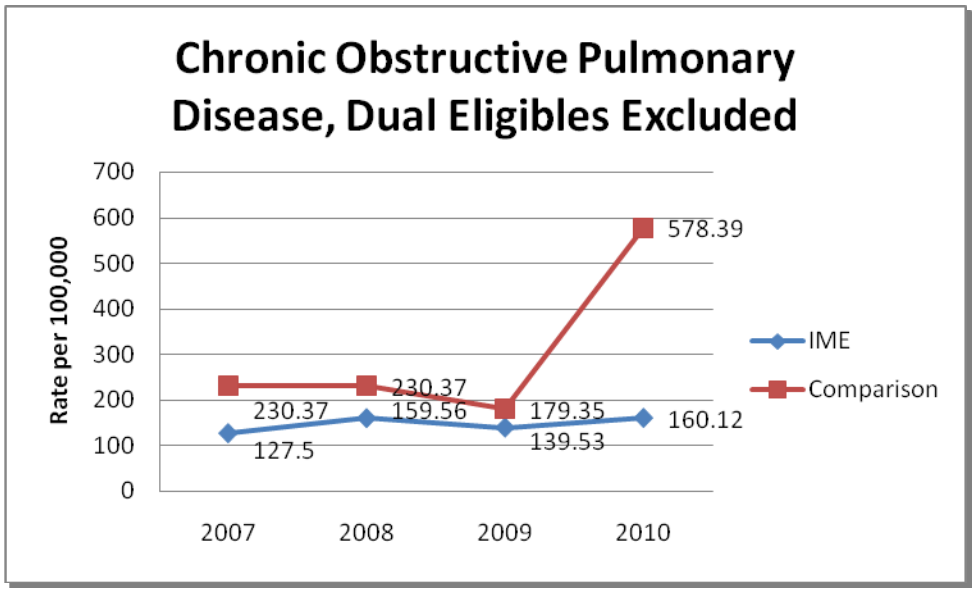


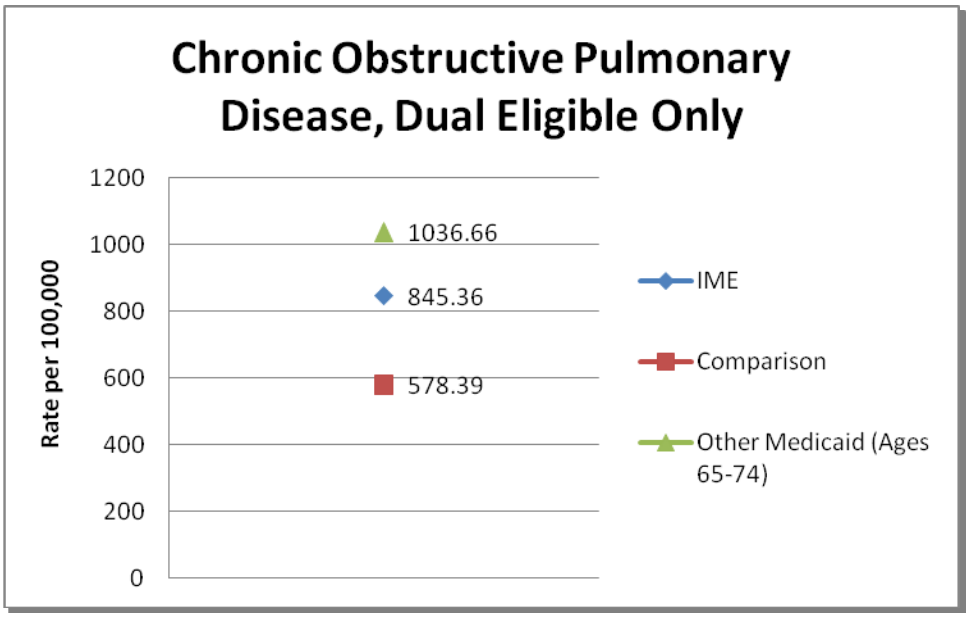



ANALYSIS: Despite having fewer short term complications from Diabetes, Iowa's dual eligible members appear to have experienced a higher level of long term complications from diabetes than the national benchmark but lower than comparison with a senior Medicaid population. Complications such as these could have contributed to a member becoming disabled and, therefore, qualifying for Medicare.

Chronic Obstructive Pulmonary Disease (COPD) Admission Rate (PQI 5)

Chronic obstructive pulmonary disease (COPD) comprises three primary diseases that cause respiratory dysfunction—asthma, emphysema, and chronic bronchitis—each with distinct etiologies, treatments, and outcomes. It can often be controlled in an outpatient setting. Smoking and socioeconomic status may influence the progression of the disease. COPD is characterized by occasional, sudden worsening of symptoms called acute exacerbations, most of which are caused by infection and intensified by smoking.

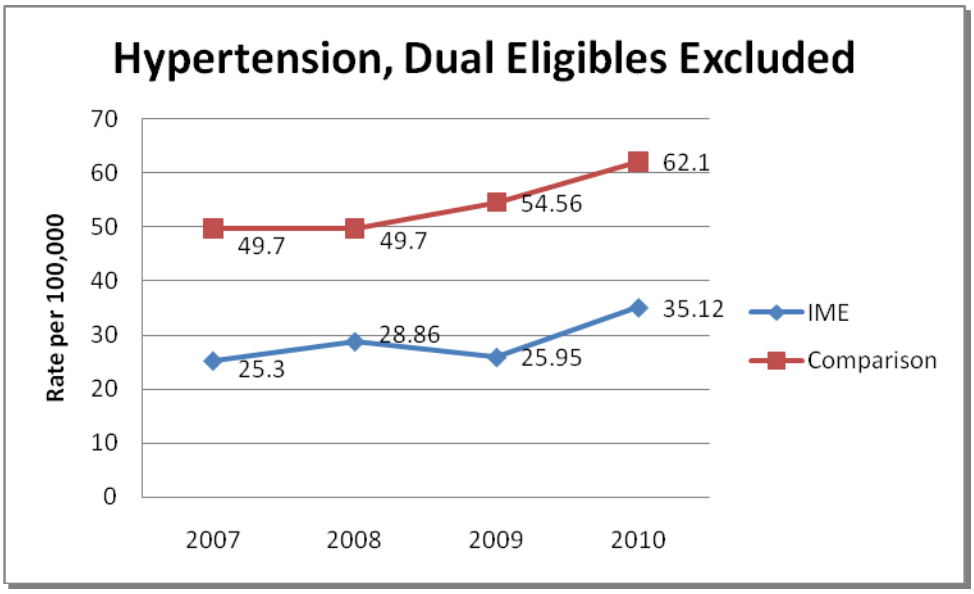


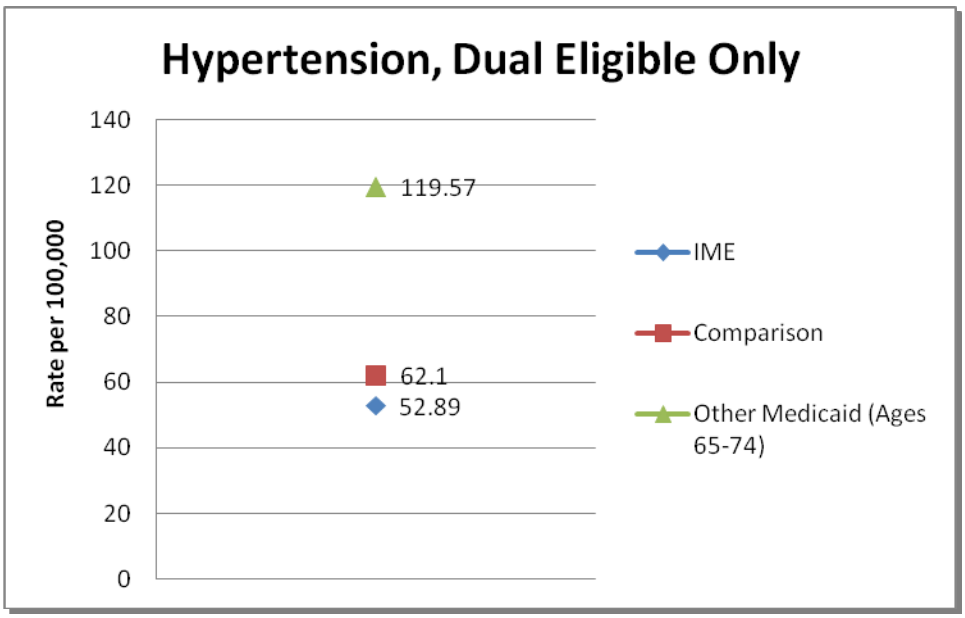



ANALYSIS: Iowa's dual population is significantly higher on concerns related to COPD than the benchmark but lower than the benchmark for senior Medicaid members.

Hypertension Admission Rate (PQI 7)

Hypertension is a chronic condition in which the systemic arterial blood pressure is elevated. Hypertension is often controllable in an outpatient setting with appropriate use of drug therapy. Although hypertension is a common condition, hospitalizations for complications of hypertension are relatively uncommon. Low income has been found to have a positive correlation with admission for hypertension.

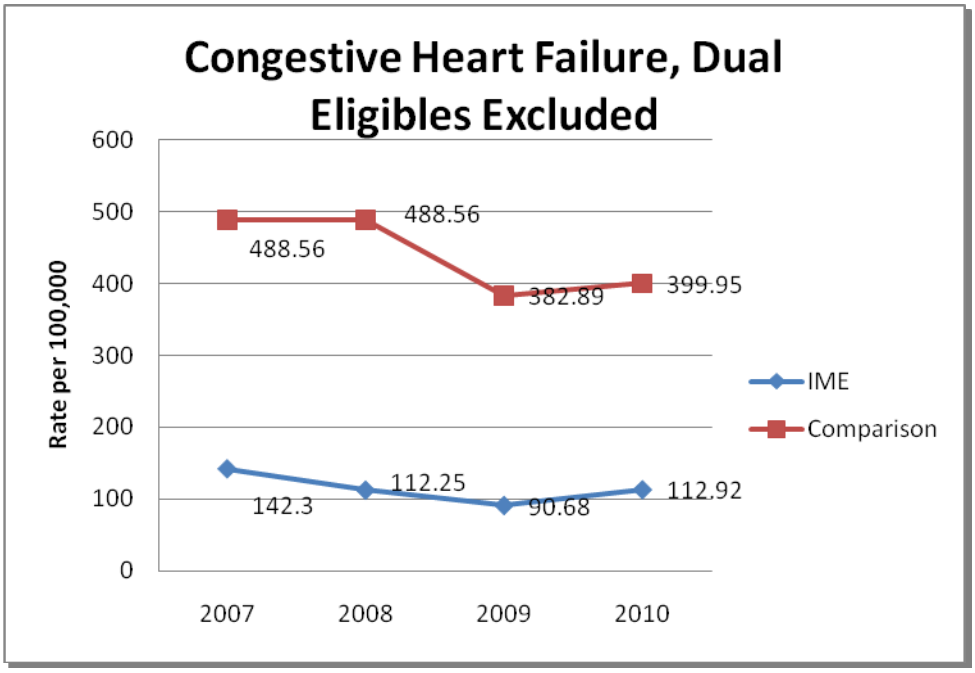


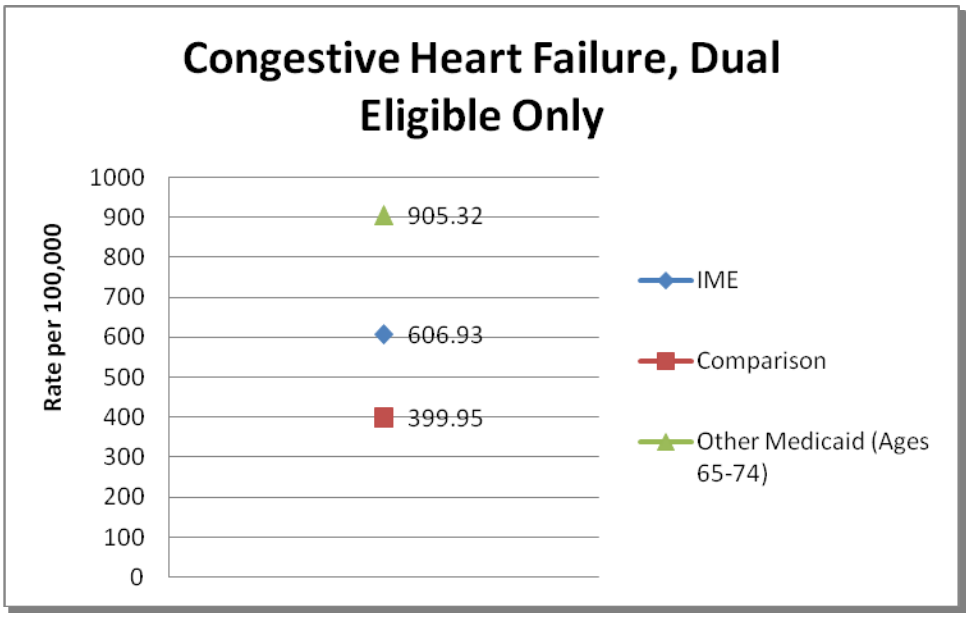



ANALYSIS: The national benchmark has seen a steady increase. Iowa's dual population is slightly lower than the benchmark. In this measure the comparison rate falls within the 95% confidence interval which indicates that there is possibly no difference between the Iowa Medicaid dual eligible rate and the national benchmark.

Congestive Heart Failure Admission Rate (PQI 8)

Congestive heart failure (CHF) occurs when the heart can no longer pump blood efficiently. It can be controlled in an outpatient setting for the most part; however, the disease is a chronic progressive disorder for which some hospitalizations are appropriate. The causes for admissions may include poor quality care, lack of patient compliance, or problems accessing care. As with hypertension, low income has been found to have a positive correlation with CHF.

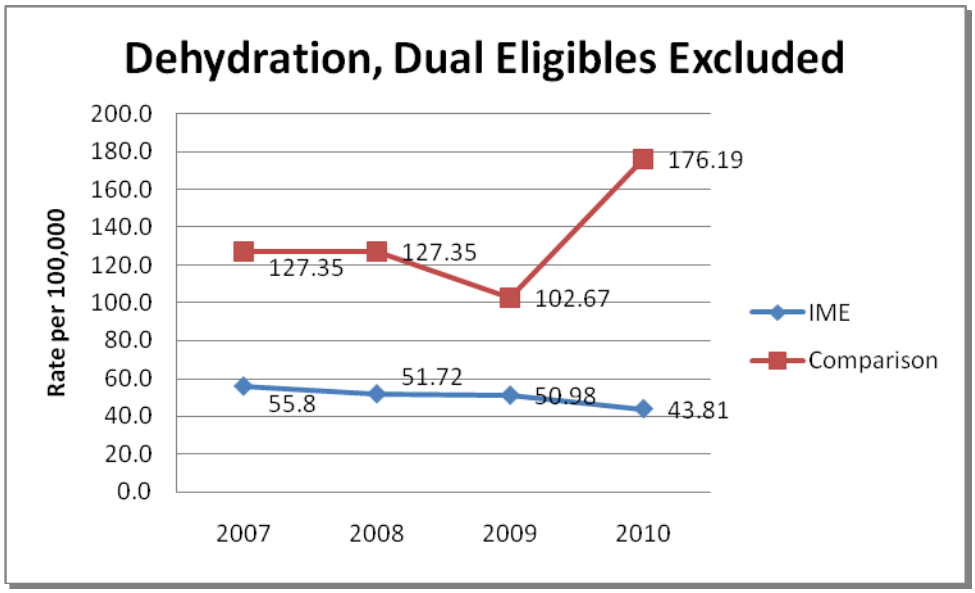


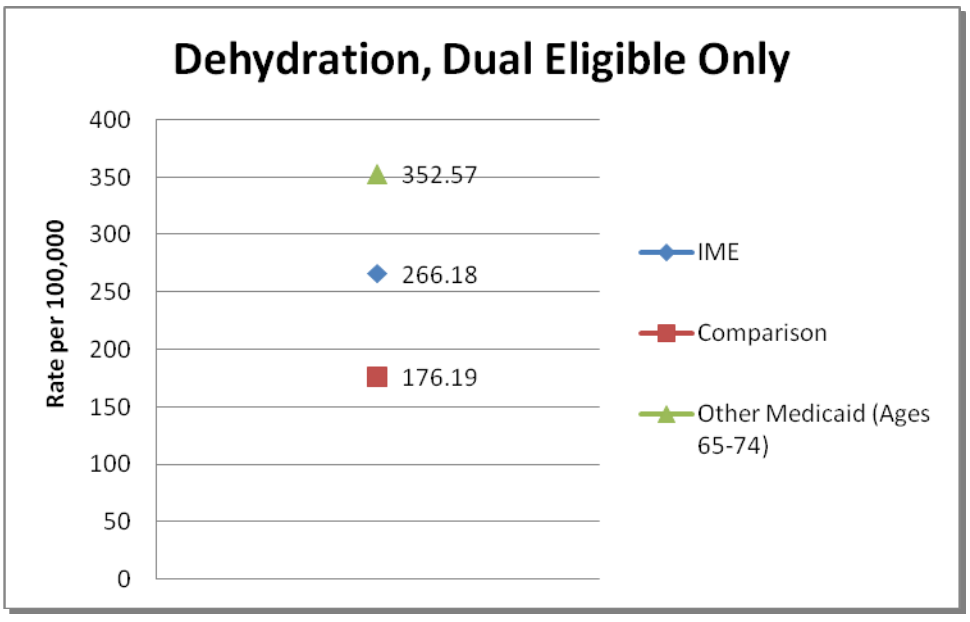



ANALYSIS: Iowa Medicaid's results have always been below the national benchmark in this measure. Iowa's dual eligible population, however, is considerably above the benchmark.

Dehydration Admission Rate (PQI 10)

Dehydration is a serious acute condition that occurs in frail patients and patients with other underlying illnesses following insufficient attention and support for fluid intake. Dehydration can for the most part be treated in an outpatient setting, but it is potentially fatal for elderly, very young children, frail patients, or patients with serious co-morbid conditions. Admission for dehydration is somewhat common and is higher in low-income populations.

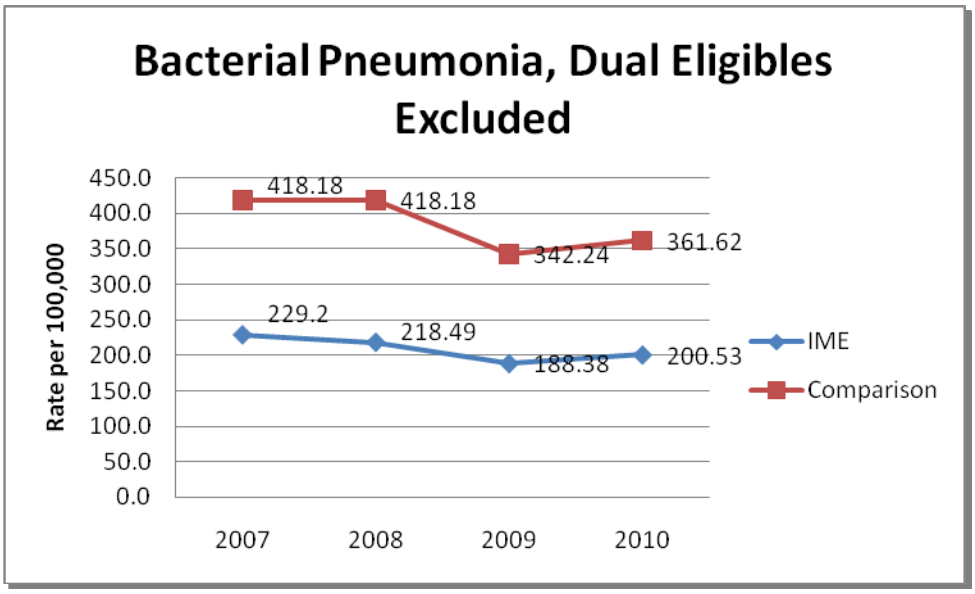


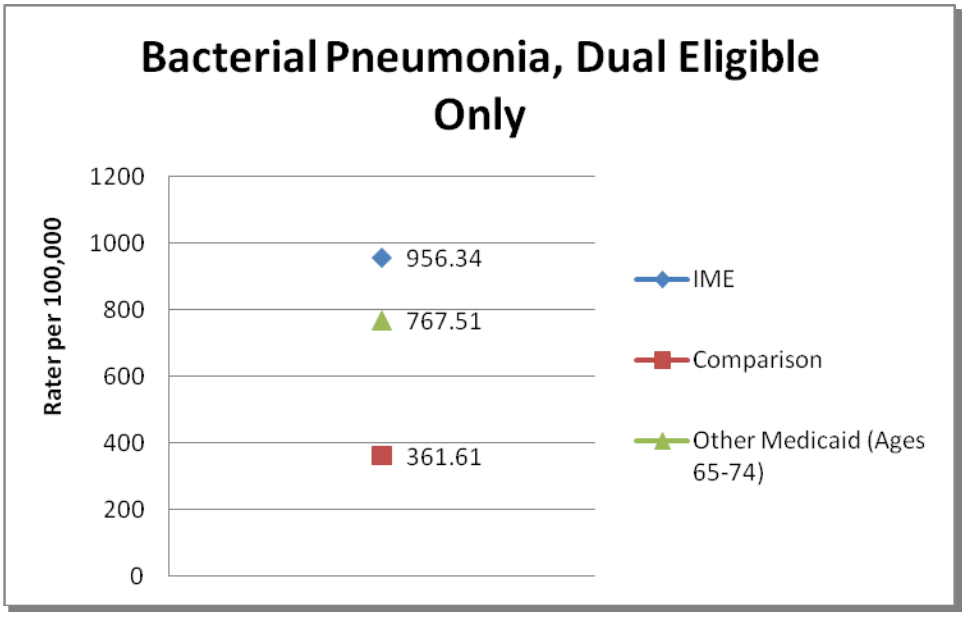



ANALYSIS: While the national benchmark experienced a sharp increase, Iowa Medicaid's results decreased, Iowa's dual population, however, exceeds the national benchmark. Again, a result higher than the benchmark may indicate a concern with recognition of symptoms or timely care.

Bacterial Pneumonia Admission Rate (PQI 11)

Bacterial pneumonia is a relatively common acute condition, treatable for the most part with antibiotics. If left untreated in susceptible individuals—such as the elderly—pneumonia can lead to death. Admission for pneumonia is relatively common. Age may be a particularly important factor. Vaccination for pneumococcal pneumonia in the elderly and early management of bacterial respiratory infections on an ambulatory basis may reduce admissions with pneumonia. Co-morbidities do not significantly affect the incidence of hospitalization for pneumonia. Again, the condition is found at a higher rate among low-income populations.

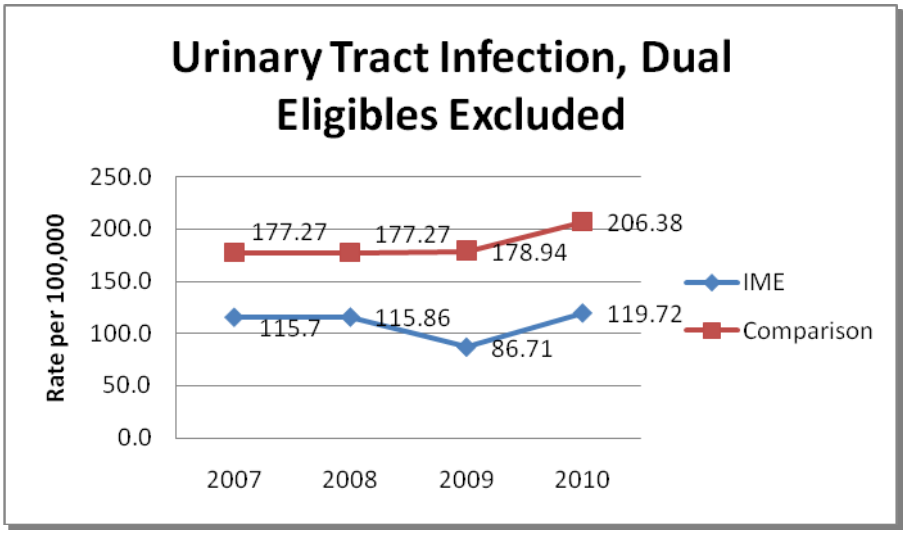


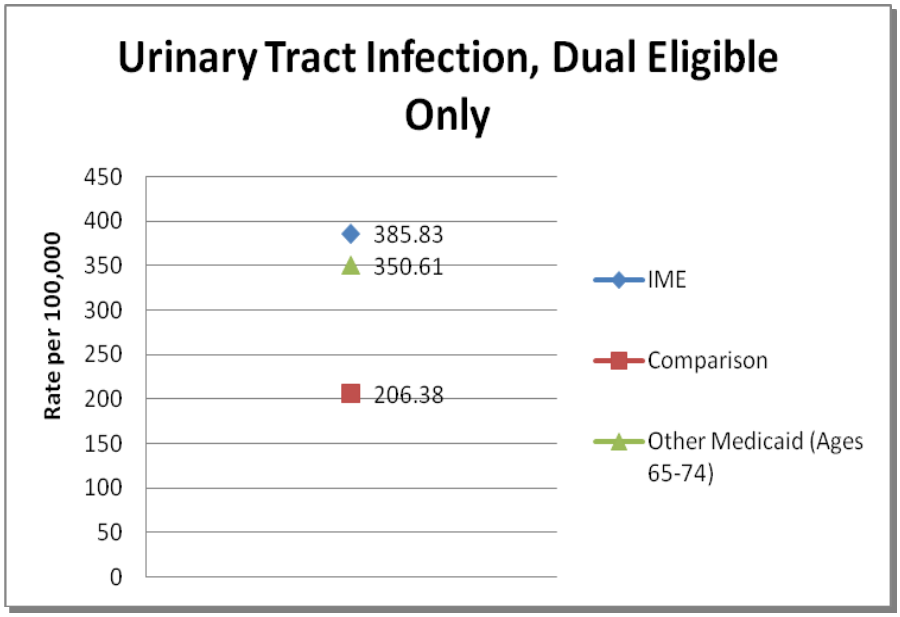



ANALYSIS: Iowa's dual population is significantly higher than the national benchmark with regard to bacterial pneumonia preceding hospitalization. Over 1000 cases were identified. Iowa dual eligible members also exceed the senior Medicaid population.

Urinary Tract Infection Admission Rate (PQI 12)

Urinary tract infection is a common acute condition that can be treated with antibiotics in an outpatient setting. This condition can also progress to more clinically significant infections in vulnerable individuals with inadequate treatment. The numerator for this measure represents non-maternal discharges of age 18 years and older with principal diagnosis of urinary tract infection.

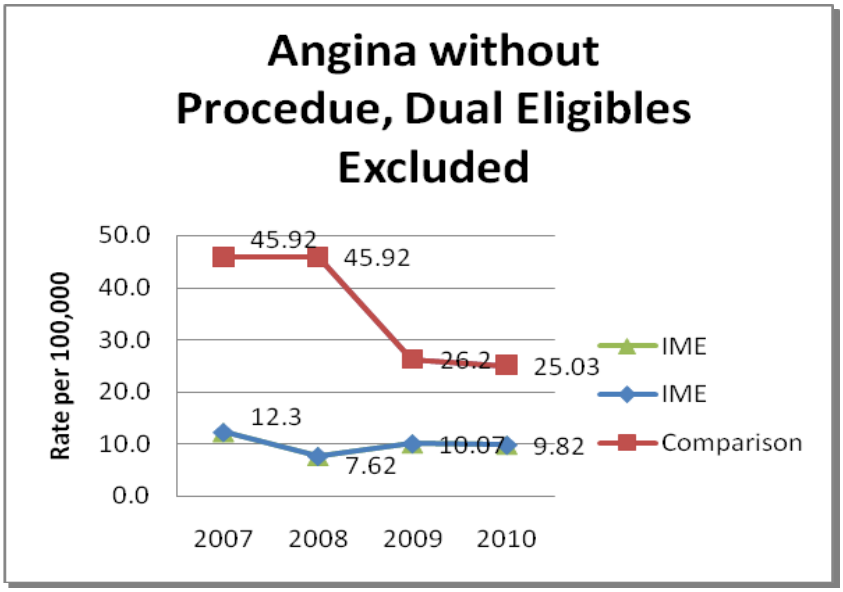


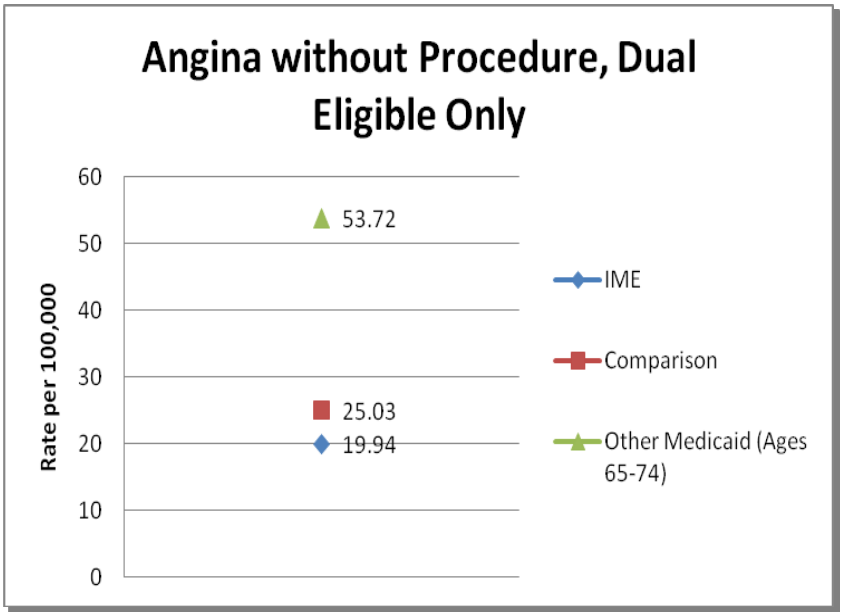



ANALYSIS: Urinary tract infections more frequently result in hospitalization for the dual eligible population. Iowa's dual eligibles and the senior Medicaid population both experienced rates higher than the traditional benchmark. In Iowa there were 445 dual eligible members hospitalized with urinary tract infection in CY2011.

Angina without Procedure Admission Rate (PQI 13)

Stable and unstable angina are symptoms of potential coronary artery disease. Effective management of coronary disease reduces the occurrence of major cardiac events such as heart attacks, and may also reduce admission rates for angina. Admission for angina is relatively common. Risk factors for consideration include smoking, hyperlipidemia, hypertension, diabetes, and socioeconomic status. Elderly age (over 70), diabetes, and hypertension have also been associated with being at higher risk for angina.

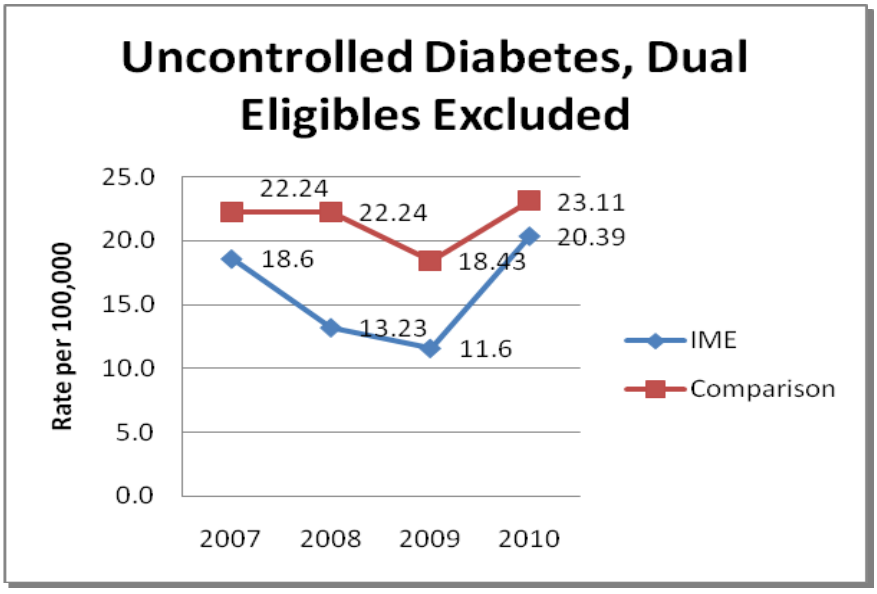


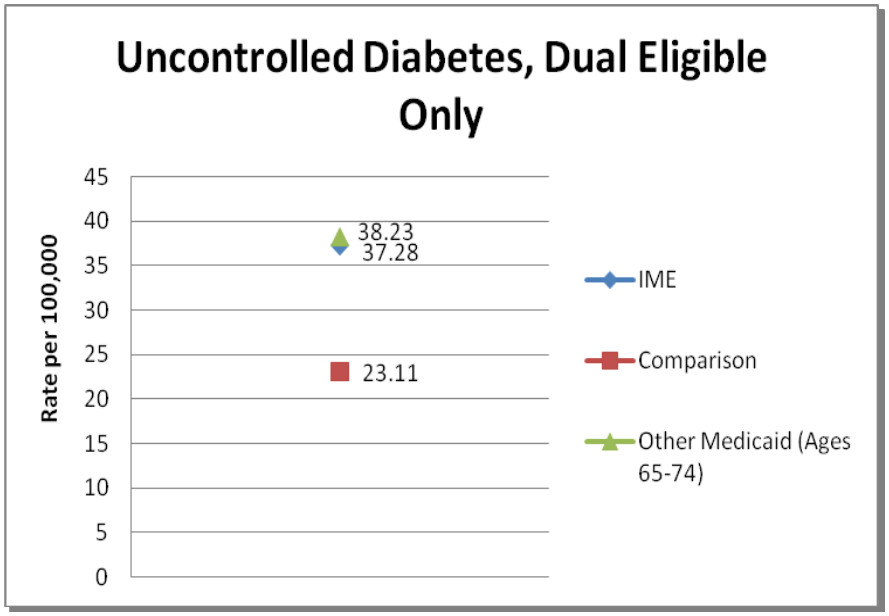



ANALYSIS: Iowa's dual population rate appears to be below the national benchmark. In this measure the comparison rate falls within the 95% confidence interval which indicates that there is possibly no difference between the Iowa Medicaid dual eligible rate and the national benchmark.

Uncontrolled Diabetes Admission Rate (PQI 14)

Uncontrolled diabetes should be used in conjunction with short-term complications of diabetes, which include diabetic ketoacidosis, hyperosmolarity, and coma. Minorities have higher rates of diabetes. Admissions occur because diabetic emergencies are potentially life-threatening.

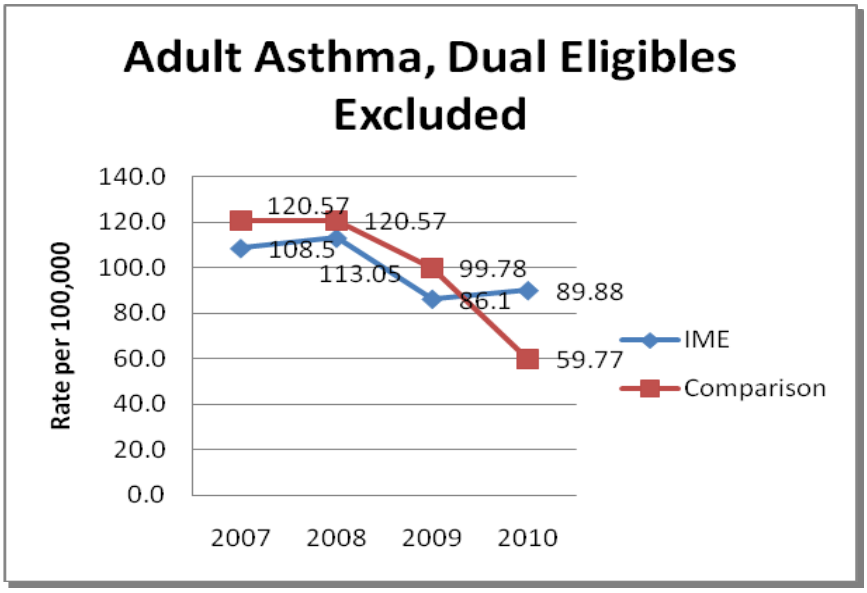


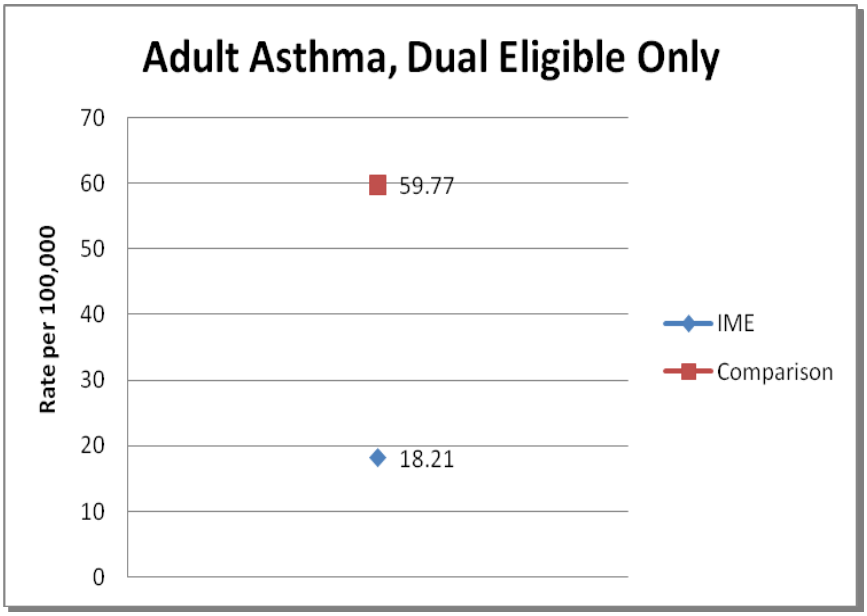



ANALYSIS: While Iowa Medicaid's data in 2010 remains below the national benchmark, Iowa Medicaid experienced a sharp increase in hospitalizations related to uncontrolled diabetes. In 2009 38 members were hospitalized and in 2010 there were 54 members hospitalized. Dual eligible members who were hospitalized in 2011 numbered 43 representing a score that exceeds the national benchmark.

Adult Asthma Admission Rate (PQI 15)

Asthma is one of the most common reasons for hospital admission and emergency room care. Most cases of asthma can be managed with proper ongoing therapy on an outpatient basis. Environmental factors such as air pollution, occupational exposure to irritants, or other exposure to allergens have been shown to increase hospitalization rates or exacerbate asthma symptoms. Admission rates have also been associated with lower socioeconomic status. Inhaled steroids may decrease risk of admission.

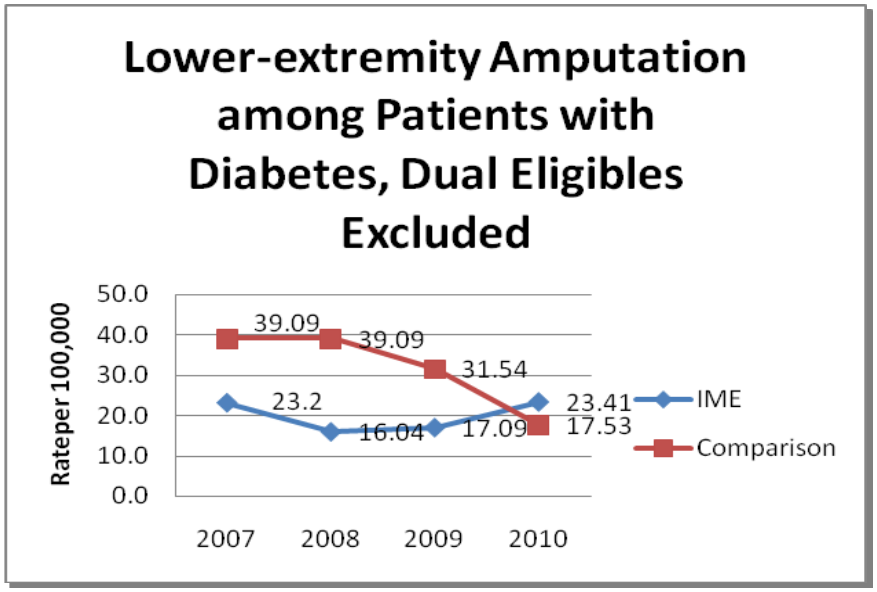


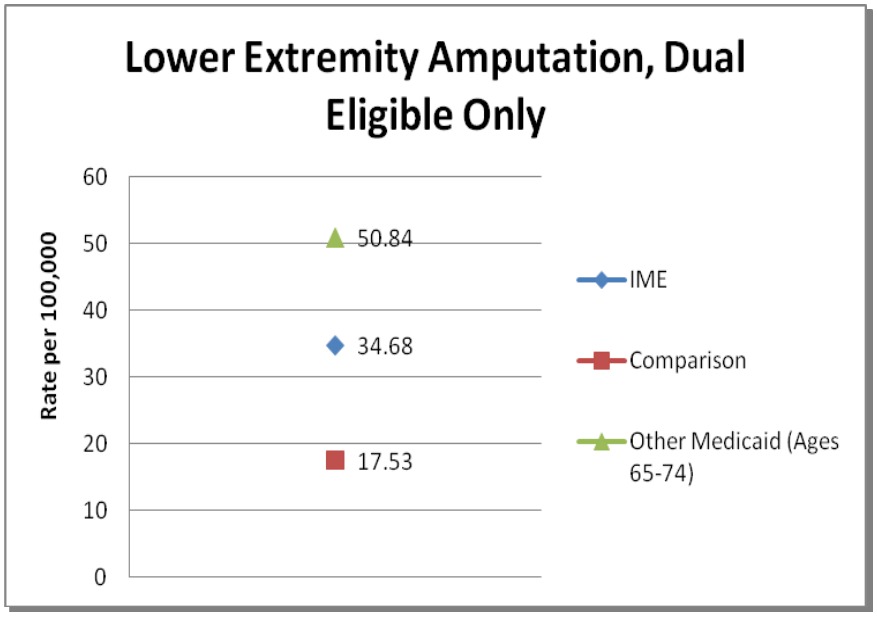



ANALYSIS: Iowa's dual population has experienced hospitalization from asthma at a significantly lower rate than is represented by the national benchmark. A senior Medicaid comparison was not available for this measure.

Rate of Lower-extremity Amputation among Patients with Diabetes (PQI 16)

Diabetes is a major risk factor for lower-extremity amputation, which can be caused by infection, neuropathy, and microvascular disease. Lower-extremity amputation (LEA) affects up to 15% of all patients with diabetes. A combination of factors may lead to this high rate of amputation, including minor trauma to the feet, which is caused by loss of sensation and may lead to gangrene. Proper long-term glucose control, diabetes education, and foot care are some of the interventions that can reduce the incidence of infection, neuropathy, and microvascular diseases.



ANALYSIS: The national benchmark experienced a significant decline from 2009 to 2010. The decrease in the national benchmark may be related to an improvement in diabetic management and emphasis placed on proper foot care. Iowa Medicaid's dual population experienced hospitalization for lower extremity amputation at a higher rate than the national benchmark but at a lower rate than the senior Medicaid benchmark. There were 40 lower extremity amputation cases among dual eligibles in Iowa in 2011.

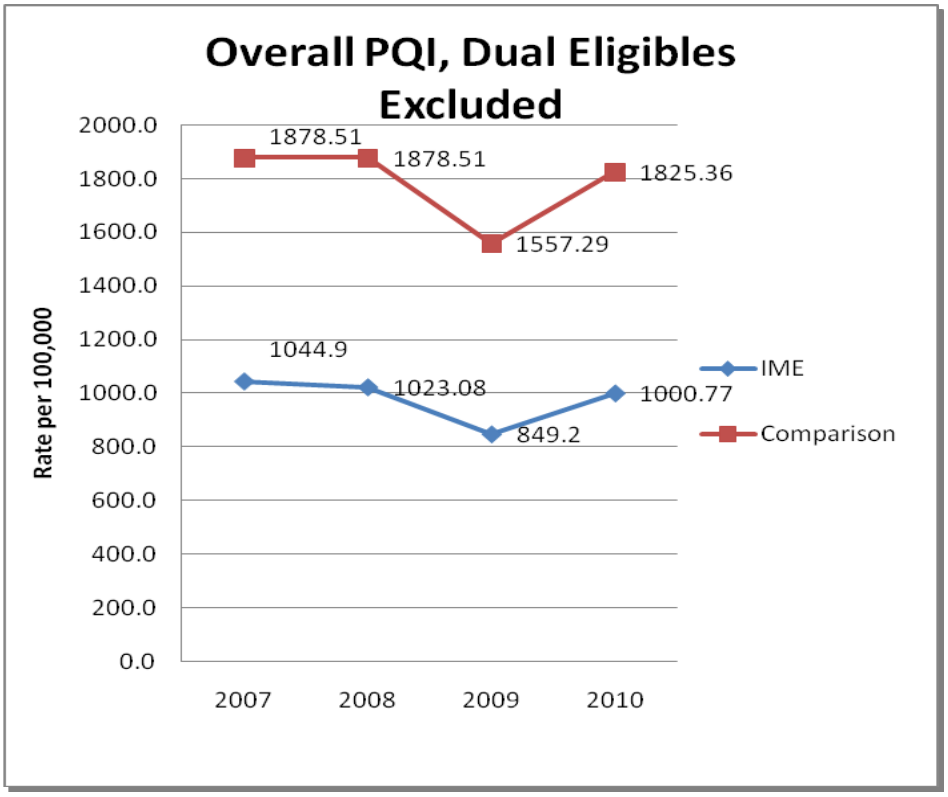
**Composite Measures**[6]

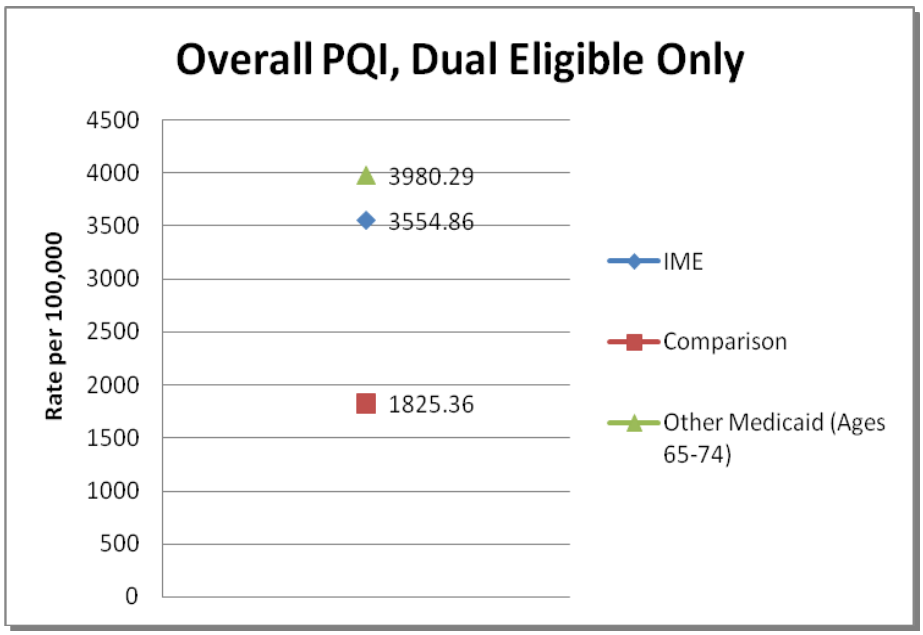
The PQI composite measures are intended to improve the statistical precision of the individual PQI and to assist in identifying determining factors. Composite measures have been constructed for overall, acute and chronic conditions. Composite measures help summarize quality across multiple indicators and help identify drivers of quality. Concerns, however, include masking important differences among components.

The composites are created by combining the numerators as all had a common denominator. The Perforated Appendix (PQI 2) is excluded from the composite measures because its denominator is different.

Separate composite measures were created for acute and chronic conditions to investigate different factors influencing hospitalization rates for each condition.

<u>Overall Composite (PQI 90)</u>

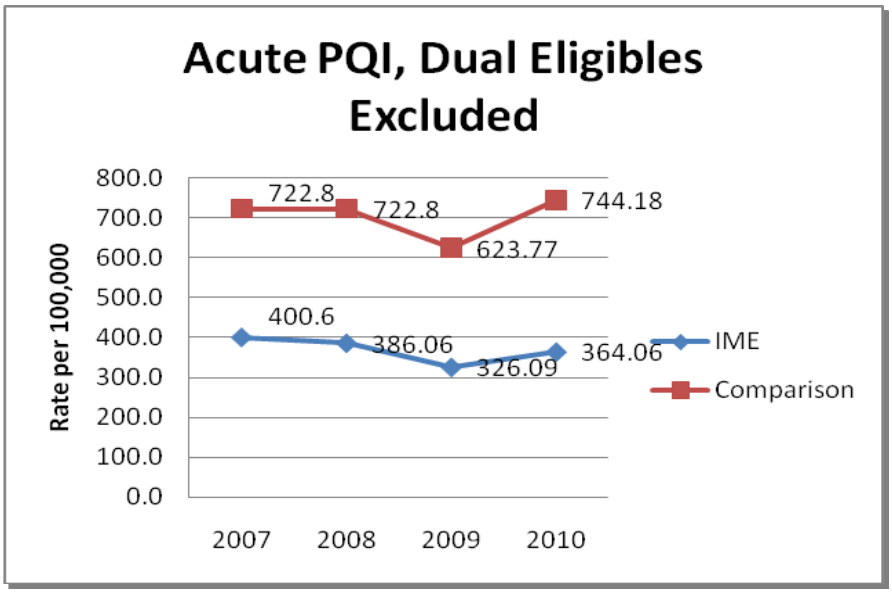


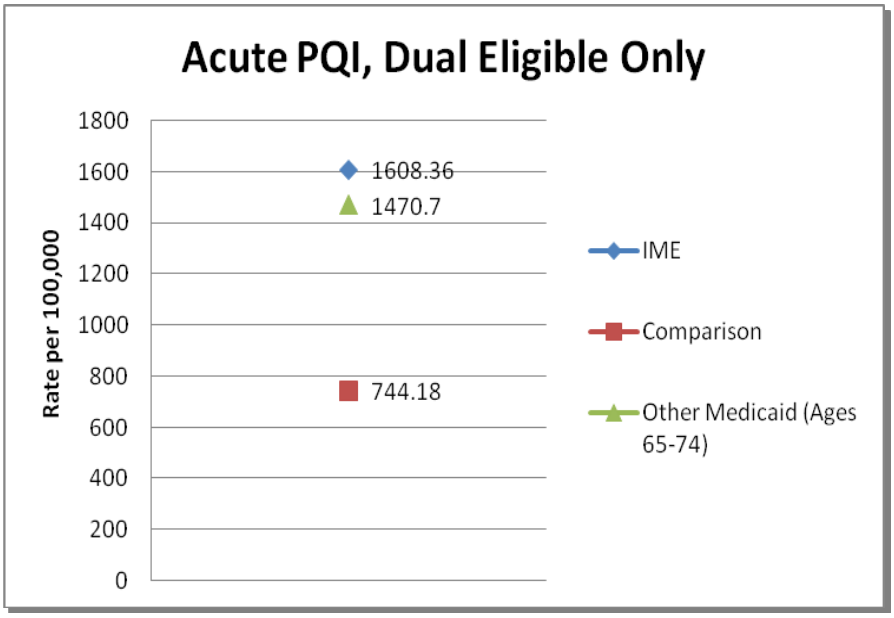



ANALYSIS: Given that in 9 of the 13 measures, Iowa's dual eligible population exceeded the national benchmark, it is not surprising that the Overall Composite measure benchmark was significantly exceeded. While Iowa's dual eligible population was below the comparison benchmark for senior Medicaid members, it is clear that these members could benefit from improved outpatient management to prevent hospitalizations.

Acute Composite (PQI 91)

The acute-only composite PQI includes three PQI conditions considered acute: dehydration, bacterial pneumonia, and urinary tract infection.

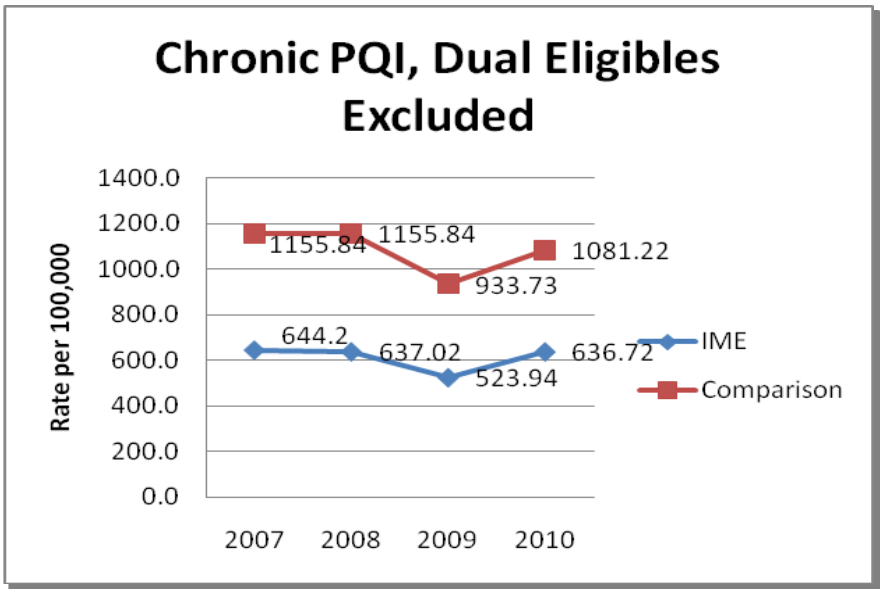


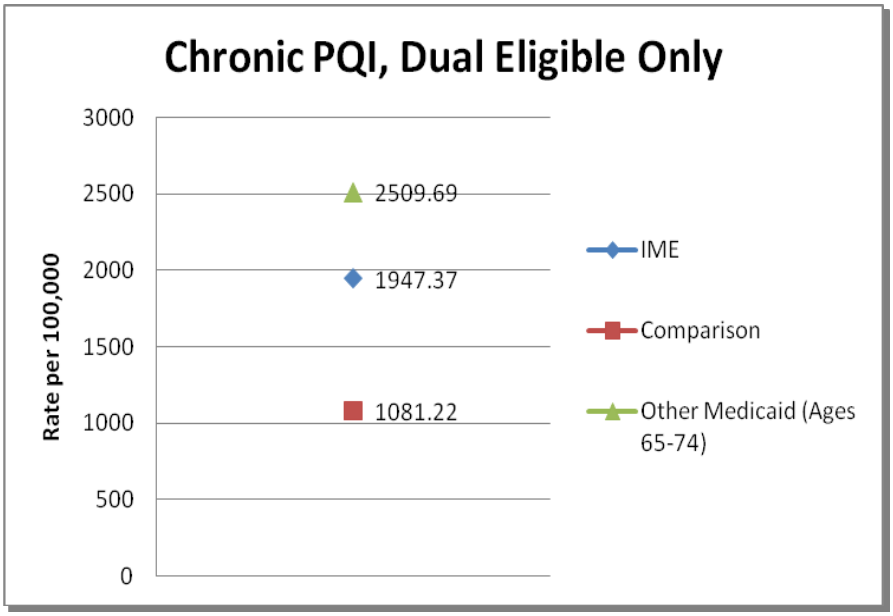



ANALYSIS: While Iowa Medicaid's general population is below the benchmark, the dual eligible population exceeded the benchmark in all three conditions: dehydration, bacterial pneumonia and urinary tract infection, conditions that could have been prevented but instead resulted in hospitalization. Timely recognition of symptoms and timely access to care could be contributing factors.

Chronic Composite (PQI 92)

The chronic-only composite PQI includes nine PQI indicators that measure chronic conditions: diabetes, chronic obstructive pulmonary disease (COPD), hypertension, congestive heart failure (CHF), angina, and asthma.






ANALYSIS: Iowa dual population fared slightly better with regard to chronic conditions, exceeding the benchmark in 6 of the 9 indices. High cost areas of concern include diabetes, congestive heart failure and chronic obstructive pulmonary disease.

**Dual Eligible PQI Analysis Summary*:***

Iowa Medicaid's dual population exceeded the national norms (all payers, all ages) in 12 of 16 measures:

- Perforated Appendix Admission Rate (PQI 2)
- Diabetes Long-term Complications Admission Rate (PQI 3)
- Chronic Obstructive Pulmonary Disease (COPD) Admission Rate (PQI 5)
- Congestive Heart Failure Admission Rate (PQI 8)
- Dehydration Admission Rate (PQI 10)
- Bacterial Pneumonia Admission Rate (PQI 11)
- Urinary Tract Infection Admission Rate (PQI 12)
- Uncontrolled Diabetes Admission Rate (PQI 14)
- Rate of Lower-extremity Amputation among Patients with Diabetes (PQI 16)
- Overall Composite (PQI 90)
- Acute Composite (PQI 91)
- Chronic Composite (PQI 92)

Iowa's dual population achieved scores lower than the national benchmarks in two measures reflective of two different chronic diseases:

- Diabetes Short-term Complications Admission Rate (PQI 1)
- Adult Asthma Admission Rate (PQI 15)

In two other measures related to heart disease, Iowa Medicaid's data indicates scores equal to national benchmarks:

- Hypertension Admission Rate (PQI 7)
- Angina without Procedure Admission Rate (PQI 13)

There was not dual eligible comparable population for the PQIs. Although approximately 60 percent of Iowa's dual eligibles are younger than age 65, comparison was provided to a senior Medicaid population. Iowa Medicaid dual population fared better in 9 of 16 measures compared to a senior Medicaid population:

- Diabetes Short-term Complications Admission Rate (PQI 1)
- Diabetes Long-term Complications Admission Rate (PQI 3
- Hypertension Admission Rate (PQI 7)
- Congestive Heart Failure Admission Rate (PQI 8)
- Dehydration Admission Rate (PQI 10)
- Angina without Procedure Admission Rate (PQI 13)
- Rate of Lower-extremity Amputation among Patients with Diabetes (PQI 16)
- Overall Composite (PQI 90)
- Chronic Composite (PQI 92)

PQIs reflect conditions that are preventable with good outpatient care. In FY2011 Iowa's dual eligible population experienced a high level of these conditions with resulting hospitalizations, particularly in the area of acute conditions. Iowa's dual eligibles exceeded benchmarks in all three acute condition measures, thereby also exceeding the Acute Composite Measure:

- Dehydration Admission Rate (PQI 10)
- Bacterial Pneumonia Admission Rate (PQI 11)
- Urinary Tract Infection Admission Rate (PQI 12)
- Acute Composite (PQI 91)

Undesirable scores in these areas could be a reflection of lack of awareness of symptoms and/or lack of timely access to outpatient care.

Although not as strikingly above benchmarks as the Acute Composite Measure, Iowa's dual population also exceeded national benchmarks in the two other composite measures:

- Overall Composite (PQI 90)
- Chronic Composite (PQI 92)

Timely and complete outpatient care can prevent hospitalizations. Iowa's dual eligible members would likely benefit from improved outpatient care.

**Dual Eligible Utilization**

Responsibility for health care costs is divided between Medicare and Medicaid. While Medicare pays the lion's share of acute services such as hospital, physician, prescriptions and other skilled services, Medicaid pays for long term care services of

facilities and home based community services. Medicaid also covers specialized services such as dental, vision and hearing as well as co-pays and Medicare premiums.

Major Diagnostic Claim Analysis

Each year an analysis is completed of expenditures by Major Diagnostic Category (MDC) and claim type. This review provides a picture of how Iowa Medicaid spends its money. It allows review of expenditures of general classes of diseases such as diseases of the digestive system or diseases of the musculoskeletal and connective tissue to inform policy makers of the diseases that may be increasing or decreasing in incidence or in costs. Review of expenditures by claim type also provides insight regarding the focus of Medicaid spending.

Data has been collated for FY02-FY11 and previously reviewed. Claims for dual eligible members have always been included in the annual review; however, differentiation of dual eligible costs has not previously been identified. For the purpose of this study the most recent three fiscal years were selected to specifically query costs per diagnosis and claim type for dual eligible members. Members are duplicated in the counts within the charts as they likely had claims in multiple claim types.

| Medicaid Expenditures | All Medicaid Expenditure | % Change from Previous Year | Dual Eligibles Expenditure | % Change from Previous Year | Dual Eligible % of All Medicaid |
|---|---|---|---|---|---|
| FY2009 | $2,929,564,236 | *** | $1,229,225,130 | *** | 42.0% |
| FY2010 | $3,115,714,056 | 6.4% | $1,288,013,158 | 4.8% | 41.3% |
| FY2011 | $3,339,528,018 | 7.2% | $1,357,178,669 | 5.4% | 40.6% |

Costs for dual eligible members are increasing at a lower annual rate than overall Medicaid costs. While the relative proportion of costs for the dual eligibles is decreasing, they continue to have a disproportionate share of the costs—40 to 42 percent while representing only 15 to 17 percent of the membership.

| Claim Type | FY2009 | | FY-2010 | | | | FY2011 | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Distinct Member | Procedure Amount | Distinct Member | % Change from 2009 | Procedure Amount | % Change from 2009 | Distinct Member | % Change from 2010 | Procedure Amount | % Change from 2010 |
| CMS 1500 | 80,333 | $69,813,846 | 80,845 | 6.4% | $72,521,560 | 3.9% | 83,106 | 2.8% | $79,104,480 | 9.1% |
| Inpatient | 2,010 | $33,737,487 | 2,081 | 3.5% | $28,450,559 | -15.7% | 1,708 | -17.9% | $26,795,368 | -5.8% |
| Outpatient | 29,074 | $82,023,997 | 34,793 | 19.7% | $85,237,233 | 3.9% | 28,441 | -18.3% | $89,315,650 | 4.8% |
| Inpatient Crossover | 20,260 | $22,915,300 | 21,383 | 5.5% | $22,217,526 | -3.0% | 26,107 | 22.1% | $24,449,254 | 10.0% |
| Outpatient Crossover | 154,970 | $36,051,378 | 160,084 | 3.3% | $38,272,609 | 6.4% | 156,858 | 2.0% | $39,324,829 | 2.7% |
| Part B Crossover | 313,459 | $38,751,546 | 312,298 | -0.4% | $40,205,326 | 5.1% | 324,295 | 3.8% | $43,735,190 | 8.8% |
| Long Term Care | 24,162 | $605,583,226 | 30,194 | 25.0% | $640,879,487 | 5.8% | 23,616 | -21.8% | $674,015,269 | 5.2% |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Waiver | 34,955 | $292,722,583 | 34,106 | -2.4% | $311,528,208 | 6.4% | 23,962 | -29.7% | $319,947,037 | 2.7% |
| Pharmacy | 39,328 | $12,081,331 | 39,608 | 0.7% | $11,545,306 | -4.4% | 39,800 | 0.5% | $11,509,089 | 0.3% |
| Dental | 24,161 | $9,420,395 | 24,716 | 2.2% | $10,500,667 | 11.5% | 25,308 | 2.4% | $10,887,538 | 3.7% |
| Capitation | 37,784 | $25,540,554 | 37,695 | -0.2% | $27,114,937 | 6.2% | 70,716 | 87.6% | $37,730,065 | 39.1% |
| Gross Adjustment | 1,613 | $583,488 | 1,991 | *** | -$460,260 | *** | 5,528 | *** | $364,900 | *** |
| Total | *** | $1,229,225,130 | *** | *** | $1,288,013,158 | 4.8% | *** | *** | $1,357,178,669 | 5.4% |

Claims types are displayed with distinct members receiving services and costs with the following notations:

- A spike occurred in FY2010 with the number of distinct dual eligible members per claim type for Outpatient and Long Term Care claims. Costs in those two categories, however, did not significantly increase.
- Inpatient claims experienced a significant drop in distinct members in both FY2010 and FY2011 and a smaller decrease in payments.
- Inpatient Crossovers demonstrated significant increases in FY2011, 22.1 percent in members and 10.0 percent in costs.
- Part B Crossovers also experienced an increase in FY2011, 3.8 percent in members but 8.8 percent in costs.
- Significant changes are noted in Capitation claims in FY2010 with the addition of persons over 65 to the Iowa Plan.
- While the dual eligible July 1 census increased by only 0.5 percent from 2009 to 2011 and the dual eligible members with at least one paid claim decreased by 5.0 percent from 2009 to 2011. Costs for the dual eligible members in the same time period increased 10.4 percent.

| Claim Type | FY2009 | | FY2010 | | FY2011 | |
|---|---|---|---|---|---|---|
| | Procedure Amount | % of Total | Procedure Amount | % of Total | Procedure Amount | % of Total |
| CMS 1500 | $69,813,846 | 5.7% | $72,521,560 | 5.6% | $79,104,480 | 5.8% |
| Inpatient | $33,737,487 | 2.7% | $28,450,559 | 2.2% | $26,795,368 | 2.0% |
| Outpatient | $82,023,997 | 6.7% | $85,237,233 | 6.6% | $89,315,650 | 6.6% |
| In Pt Crossover | $22,915,300 | 1.9% | $22,217,526 | 1.7% | $24,449,254 | 1.8% |
| Ot Pt Crossover | $36,051,378 | 2.9% | $38,272,609 | 3.0% | $39,324,829 | 2.9% |
| Part B Crossover | $38,751,546 | 3.2% | $40,205,326 | 3.1% | $43,735,190 | 3.2% |
| Long Term Care | $605,583,226 | 49.3% | $640,879,487 | 49.8% | $674,015,269 | 49.7% |
| Waiver | $292,722,583 | 23.8% | $311,528,208 | 24.2% | $319,947,037 | 23.6% |
| Pharmacy | $12,081,331 | 1.0% | $11,545,306 | 0.9% | $11,509,089 | 0.8% |
| Dental | $9,420,395 | 0.8% | $10,500,667 | 0.8% | $10,887,538 | 0.8% |
| Capitation | $25,540,554 | 2.1% | $27,114,937 | 2.1% | $37,730,065 | 2.8% |
| Gross Adjustment | $583,488 | 0.0% | -$460,260 | 0.0% | $364,900 | 0.0% |
| Total | $1,229,225,130 | 100.0% | $1,288,013,158 | 100.0% | $1,357,178,669 | 100.0% |

The proportion of payments for dual eligible care by claim type has remained relatively stable over the past three years including the heavy hitters of Long Term Care and Waiver. A small proportional decrease is seen in Inpatient Claims along with a small

proportional increase in CMS 1500s which is a positive trend away from inpatient care to care in office settings. Below are the top six MDCs for the dual eligibles.

| MVM Rollup | FY2009 | | FY2010 | | FY2011 | |
|---|---|---|---|---|---|---|
| | Distinct Member | Procedure Amount | Distinct Member | Procedure Amount | Distinct Member | Procedure Amount |
| Endocrine, Nutritional & Metabolic & Immunity Disorders | 40,301 | $40,424,931 | 41,653 | $43,593,304 | 42,608 | $46,469,617 |
| Diseases of the Muscoloskeletal & Connective Tissue | 55,492 | $46,360,287 | 58,517 | $47,344,525 | 59,717 | $54,043,963 |
| Diseases of the Nervous System & Sense Organs | 63,168 | $66,609,307 | 64,539 | $67,071,177 | 65,890 | $71,203,499 |
| Symptoms, Signs & Ill-defined Conditions | 73,373 | $68,597,013 | 77,248 | $82,174.718 | 77,950 | $97,482,032 |
| Diseases of the Circulatory System | 49,854 | $104,420,178 | 51,208 | $105,661,442 | 50,762 | $115,054,938 |
| Mental Disorders | 39,193 | $163,843,870 | 41,338 | $168,219,918 | 41,537 | $196,168,460 |

Of the top six MDCs, Mental Disorders and Symptoms, Signs and Ill-defined Conditions have had the largest rate of increase from 2009 to 2011, 19.7 percent and 42.1 percent respectively. Within the category of Mental Disorders, 67.2 percent were Long Term Care claims.

Specific claim types were reviewed to determine the primary medical concerns. As described, approximately 68 percent of waiver members are dual eligible. Below describes the medical focus of waiver claims.

| Waiver Claims Medical Conditions | FY2009 | | FY2010 | | FY2011 | |
|---|---|---|---|---|---|---|
| | Distinct Member | Procedure Amount | Distinct Member | Procedure Amount | Distinct Member | Procedure Amount |
| Endocrine, Nutritional & Metabolic & Immunity Disorders | 180 | $272,014 | 186 | $309,638.21 | 179 | $385,963 |
| Diseases of the Muscoloskeletal & Connective Tissue | 239 | $416,491 | 204 | $388,829.06 | 207 | $421,862 |
| Injury & Poisoning | 37 | $141,946 | 53 | $136,589.13 | 799 | $446,462 |
| Diseases of the Circulatory System | 293 | $447,900 | 271 | $505,817.92 | 250 | $517,859 |
| Mental Disorders | 671 | $11,786,777 | 729 | $12,993,177.57 | 841 | $13,221,021 |

Above are the top five medical conditions found on waiver claims for dual eligible members. Not surprisingly, Mental disorders is, by far, the highest in frequency and amount. The increase in 2011 for Injury and Poisoning is likely related to changes in the MDCs rather than an influx of a particular condition.

| CMS 1500 Claims Medical Conditions | FY2009 | | FY2010 | | FY2011 | |
|---|---|---|---|---|---|---|
| | Distinct Member | Procedure Amount | Distinct Member | Procedure Amount | Distinct Member | Procedure Amount |
| Diseases of the Respiratory System | 2,861 | $1,882,048 | 2,682 | $1,670,382.46 | 2,656 | $1,533,403.39 |
| Diseases of the Nervous System & Sense Organs | 21,665 | $3,754,461.18 | 21,633 | $3,706,730.29 | 21,894 | $3,804,292.76 |
| Symptoms, Signs, and Ill-defined Conditions | 9,494 | $4,981,143.86 | 10,136 | $5,238,849.58 | 10,511 | $5,099,751.12 |
| Mental Disorders | 3,870 | $23,088,971.81 | 3,735 | $23,281,582.59 | 3,842 | $28,019,571.06 |

CMS 1500s are professional claims that should always have a qualifying diagnosis. Above are the top four categories for services billed on CMS 1500s. Again, Mental Disorders is significantly the highest category for dual eligibles of this claim type. Cost per distinct member varies widely:

- Disease of the Nervous System - $174 per member
- Mental Disorders - $7,293 per member

| Long Term Care Medical Conditions | FY2009 | | FY2010 | | FY2011 | |
|---|---|---|---|---|---|---|
| | Distinct Member | Procedure Amount | Distinct Member | Procedure Amount | Distinct Member | Procedure Amount |
| Infectious & Parasitic Diseases | 16,457 | $12,616,163 | 16,742 | $12,616,808 | 17,262 | $14,503,280 |
| Diseases of the Respiratory System | 41,898 | $30,425,118 | 42,172 | $31,318,019 | 43,732 | $33,781,097 |
| Injury & Poisoning | 31,876 | $27,2978,110 | 32,644 | $26,078,552 | 33,583 | $29,584,643 |
| Endocrine, Nutritional & Metabolic & Immunity Disorders | 1,132 | $23,100,271 | 1,510 | $25,007,171 | 1,076 | $27,519,713 |
| Diseases of the Muscoloskeletal & Connective Tissue | 1,545 | $28,729,043 | 2,202 | $29,543,996 | 1,677 | $34,972,785 |
| Diseases of the Nervous System & Sense Organs | 1,913 | $44,184,835 | 2,254 | $43,484,146 | 1,772 | $46,849,849 |
| Symptoms, Signs, and Ill-defined Conditions | 2,490 | $43,947,902 | 3,706 | $55,927,191 | 3,061 | $69,755,935 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Diseases of the Circulatory System | 3,358 | $73,928,551 | 4,141 | $76,071,097 | 3,286 | $83,988,631 |
| Mental Disorders | 3,479 | $104,883,792 | 4,050 | $108,820,355 | 3,612 | $131,842,912 |

Long Term Care claims are claims filed by facilities – nursing, skilled, intermediate – and facilities providing care to persons with mental disabilities. Approximately 96 percent of Medicaid members living in facilities are dual eligible so it is important to understand the diagnoses that bring them to facilities. Again, the highest number of members, highest costs and highest costs per member are related to Mental Disorders. Diseases of the Circulatory System are second.

A large proportion of claims for dual eligible members do not have an articulated diagnosis. Below these categories are examined by claim type.

| Waiver Claims Non-identified Conditions | FY2009 | | FY2010 | | FY2011 | |
|---|---|---|---|---|---|---|
| | Distinct Member | Procedure Amount | Distinct Member | Procedure Amount | Distinct Member | Procedure Amount |
| V01-V86 | 428 | $1,673,671 | 533 | $2,148,463 | 527 | $2,160,489 |
| Unknown | 19,455 | $210,402,676 | 19,527 | $228,725,299 | 19,404 | $239,600,277 |
| Null | 12,828 | $66,324,420 | 11,967 | $65,127,808 | 1,130 | $62,092,541 |

Descriptions of the above categories are as follows:

- Null categories consist of those claims where a diagnosis code was not present or required.
- Missing categories consistent of diagnosis codes that do not exist, that is they may be keyed incorrectly or simply are inaccurate codes.
- Unknown categories consist of diagnoses in the following table:

| Dx Code | Diagnosis Description |
|---|---|
| V00.00 | Internal Use Code - Emergency |
| V00.01 | Internal Use Diagnosis Code for Waiver Claims |
| V00.02 | Dental Disease Necessitating Care due to Mental Health Complication |
| V00.99 | Internal Use Emergency Code |
| V88.88 | State-Only Funded Exception to Policy |
| V99.99 | FTP Funded Exception to Policy |
| V99.00 | Halitosis |

The largest category, Unknown, includes the code that waiver providers are instructed to use V00.01. This category represents 74.9 percent of all waiver claim costs and 17.7 percent of all costs for dual eligible members.

Recently, IME revised Waiver claims as part of the conversion required from atypical codes to standard codes. A field was added so that a modifier could be included on the claim form. Consideration was made of conversion to CMS 1500s in which a diagnosis would be required. Other questions arose of confidentiality of diagnoses related to waiver providers who were providing services related to a functional impairment and not

related to a specific diagnosis. These questions impacted the decision to not include diagnoses on waiver claims at this time.

As described in previous MVM studies, alternatives have been suggested:

- Require all professional waiver providers to include a diagnosis.
- Populate non-professional claims (Meals on Wheels, Transportation, etc.) with diagnosis from ISIS.

| CMS 1500 Claims Non-medical Conditions | FY2009 | | FY2010 | | FY2011 | |
|---|---|---|---|---|---|---|
| | Distinct Member | Procedure Amount | Distinct Member | Procedure Amount | Distinct Member | Procedure Amount |
| V01-V86 | 9,867 | $1,286,342.86 | 10,095 | $1,377,840.04 | 10,319 | $1,263,704.89 |
| Missing | 4 | -$238.44 | 8 | $386.89 | 70 | $18,430.13 |
| Unknown | 8,145 | $26,282,385.06 | 8,304 | $28,738,889.24 | 8,679 | $30,387,184.70 |

CMS 1500 claims should never have unknown diagnosis. It is likely that providers are using the waiver claim diagnosis of V00.01 to populate claims despite having the ability to enter a valid diagnosis.

| Long Term Care Non-medical Conditions | FY2009 | | FY2010 | | FY2011 | |
|---|---|---|---|---|---|---|
| | Distinct Member | Procedure Amount | Distinct Member | Procedure Amount | Distinct Member | Procedure Amount |
| V01-V86 | 1,662 | $28,416,611 | 2,366 | $32,602,910 | 1,756 | $36,223,210 |
| Unknown | 2,307 | $68,114,242 | 2,389 | $69,248,325 | 1,985 | $67,604,557 |
| Null | 3,189 | $132,266,875 | 3,451 | $139,942,490 | 2,261 | $110,081,892 |

Missing or unknown diagnoses on Long Term Care claims are decreasing with the requirement of electronic filing of claims for facilities. However, services provided by facilities could always include diagnoses.

| All Claims Non- medical Conditions | FY2009 | | FY2010 | | FY2011 | |
|---|---|---|---|---|---|---|
| | Distinct Member | Procedure Amount | Distinct Member | Procedure Amount | Distinct Member | Procedure Amount |
| V01-V86 | 51,892 | $41,145,426 | 53,375 | $45,797,462 | 49,240 | $48,534,602 |
| Missing | 34 | $18,814 | 146 | $16,752 | 410 | $93,431 |
| Unknown | 29,917 | $304,908,984 | 30,229 | $326,742,138 | 30,071 | $337,699,424 |
| Null | 173,468 | $263,510,839 | 171,748 | $269,464,127 | 195,880 | $247.234,388 |
| Total | 255,311 | $609,584,063 | 255,498 | $642,020,479 | 275,601 | $386,327,457 |

While the percentage of all claims without a valid diagnosis has decreased from 49.6 percent in 2009 to 28.5 percent in 2011, there remains a high volume of costs for dual eligibles not being attributed to a medical condition that permits greater understanding of this complex population.

Imaging Utilization

In March 2010, IME implemented a prior authorization requirement for certain high tech radiology exams. The purpose of the requirement was to that radiology exams performed on Medicaid members were medically necessary. However, exams for dual eligible members were exempt from the prior authorization requirement. Providers were informed that Medicaid will pay the applicable co-pay, coinsurance, and deductible and that prior authorization from Medicaid would not be required.

In examining the utilization of specific radiology tests identified for prior authorization, claims in outpatient settings requiring prior authorization were reviewed as well as claims in the emergency setting which do not require prior authorization. Member counts used in calculations were members with at least one paid claim in the fiscal year. Costs for the duals in these calculations do not include funds provided by Medicare.

| Dual Eligible | Outpatient Radiology Visits | Outpatient Radiology Visits per Member | Outpatient Radiology Costs to Medicaid | Outpatient Radiology Costs per Member |
|---|---|---|---|---|
| 2009 | 17,044 | 4.7 | $657,505 | $8.27 |
| 2010 | 16,608 | 4.6 | $576,270 | $7.40 |
| 2011 | 14,370 | 5.2 | $519,429 | $6.91 |

The dual eligible members with at least one paid claim has decreased (pg. 6) as have the number of high tech radiology related outpatient visits and costs. Per member/per year visits and costs have also decreased.

| Non-Dual Eligible | Outpatient Radiology Visits | Outpatient Radiology Visits per Member | Outpatient Radiology Costs to Medicaid | Outpatient Radiology Costs per Member |
|---|---|---|---|---|
| 2009 | 25,346 | 14.8 | $11,806,237 | $31.58 |
| 2010 | 25,294 | 16.1 | $10,945,211 | $26.86 |
| 2011 | 20,337 | 21.4 | $9,264,307 | $21.31 |

Non-dual eligible members have higher per member/per year high tech radiology visits and costs than dual eligible members.

| Dual Eligible | ER Radiology Visits | ER Radiology Visits per Member | ER Radiology Costs to Medicaid | ER Radiology Costs per Member |
|---|---|---|---|---|
| 2009 | 9,650 | 8.2 | $127,812 | $1.61 |
| 2010 | 9,650 | 8.1 | $136,257 | $1.75 |
| 2011 | 7,891 | 9.5 | $134,890 | $1.79 |

Per member/per year emergency room visits and costs related to high tech radiology services have remained stable for the dual eligible population.

| Non-Dual Eligible | ER Radiology Visits | ER Radiology Visits per Member | ER Radiology Costs to Medicaid | ER Radiology Costs per Member |
|---|---|---|---|---|
| 2009 | 20,392 | 18.3 | $6,597,054 | $17.64 |
| 2010 | 23,436 | 17.4 | $7,098,565 | $17.42 |
| 2011 | 20,208 | 21.5 | $6,192,226 | $14.25 |

As with outpatient visits, non-dual eligible members have higher per member/per year high tech radiology visits and costs in the emergency room than do dual eligible members.

Radiology visits per member are increasing for both dual and non-dual members. Costs per non-dual member, however are decreasing while costs per dual member are increasing.

Hospital Readmissions

Hospital readmissions has been a topic of interest for Medicare and Medicaid as it is thought improved quality of care both in and outside hospitals can prevent hospitalizations and readmissions. Besides reducing the overall costs of health care, reducing hospitalizations also reduces exposure to hospital-acquired infections. In the 4th Quarter of FY2011, Iowa Medicaid, along with fifteen other state Medicaid programs, participated in a Medicaid Medical Directors' Learning Network (MMDLN) study of hospital readmissions. Data submitted represented readmissions occurring in C2009 IME is currently participating in a follow up study with data for CY2010 due in March.

The New England Journal of Medicine addressed the readmission issue in an article on April 2, 2009.[7] This article addressed research of data from 2003-2004 and which was used to describe the patterns of rehospitalization. Their findings were that almost one fifth (19.6 percent) of the 11,855,702 Medicare beneficiaries who had been discharged from a hospital were rehospitalized within 30 days, and 34.0 percent were readmitted to a hospital within 90 days; 67.1 percent of patients who had been discharged with medical conditions and 51.5 percent of those who had been discharged after surgical procedures were rehospitalized or died within the first year after discharge. In the case of 50.2 percent of the patients who were rehospitalized within 30 days after a medical discharge to the community, there was no bill for a visit to a physician's office between the time of discharge and rehospitalization.

CMS has targeted readmission concerns by funding work for 14 Quality Improvement Organizations (QIOs) during the 9th and 10th Scopes of Work (SOW). Initiatives were implemented to improve care transitions in specifically identified communities.[8] Iowa's QIO, Telligen, selected Siouxland and North Iowa for focused assistance in reducing

hospital readmissions through their Community Based Care Transitions Program (CCTP). The team is continuing to reach out and recruit communities.

Using the specifications developed by the MMDLN, the following data for Iowa Medicaid's general population was obtained for 30 day readmission rates.

| CY2010 Readmissions Excluding Duals | Medicaid FFS | MediPASS | Combined |
|---|---|---|---|
| Readmissions within 30 Days of Discharge | 3,375 | 981 | 4,356 |
| Readmission Rate (PPR) | 8.0% | 5.4% | 7.2% |
| Total Paid Claims | $22,363,148 | $5,357,672 | $27,720,820 |

The costs per member for readmission for the non-dual population were $6,363 per readmission event.

| CY2010 Dual Eligible Readmissions | Dual Eligible Results |
|---|---|
| Readmissions within 30 Days of Discharge | 121 |
| Readmission Rate (PPR) | 9.6% |
| Medicaid Paid Claims | $1,071,911 |
| Medicare Paid Claims (crossovers) | $4,368 |
| Total Paid Claims | $1,076,279 |

Costs for dual eligible members (paid by Medicaid) were $8,894 per readmission event. This rate is 39.8% higher and does not include costs to Medicare.

While dual eligibles experienced a higher rate of readmission than the overall Medicaid population, the rate is low compared to national benchmarks.

Of the 121 events of re-admission, 32 (26.7%) were for the same Diagnostic Related Group (DRG). There were 84 (70.0%) events of return to the same hospital.

| CY2010 Dual Eligible Readmissions by Age | <1 – 20 | 21 – 64 | 65 and older |
|---|---|---|---|
| Readmissions within 30 Days of Discharge | 2 | 87 | 32 |
| Readmission Rate (PPR) | 6.1% | 10.3% | 8.3% |
| Medicaid Paid Claims | $20,122 | $810,126 | $241,663 |
| Medicare Paid Claims (crossovers) | $0 | $3,300 | $1,068 |
| Total Paid Claims | $20,122 | $813,426 | $242,731 |

While the 21-64 age group comprises 55 percent of the dual eligible population, they accounted for 72 percent of the readmission events and 76 percent of the readmission costs. The 65 and older age group comprising approximately 45 percent of the dual eligible population accounted for only 26 percent of the readmission events and 23 percent of the readmission costs.

Adult readmissions were further reviewed according to Major Diagnostic Category (MDC). The following presents the readmission by MDC for ages 21-64.

| Major Diagnostic Category | Hospitalization Events | Readmission Counts | Readmission Rate | % of All Readmissions |
|---|---|---|---|---|
| Diseases of the Respiratory System | 111 | 24 | 21.6% | 15.3% |
| Diseases of the Circulatory System | 107 | 15 | 14.0% | 9.6% |
| Injury & Poisoning | 98 | 12 | 12.2% | 7.6% |
| Diseases of the Digestive System | 83 | 17 | 20.5% | 10.8% |

Readmission MDCs are very similar for the 65 and older dual eligible population.

| Major Diagnostic Category | Hospitalization Events | Readmission Counts | Readmission Rate | % of All Readmissions |
|---|---|---|---|---|
| Diseases of the Circulatory System | 82 | 11 | 13.4% | 16.7% |
| Diseases of the Respiratory System | 72 | 18 | 25.0% | 27.3% |

Significant drop-off was noted in each category following the numbers presented above.

Iowa's participation in a readmission study with 15 other states found Iowa to be relatively low in readmission events. Similar results were found in applying the specifications to the dual eligible population. While the lion's share of readmissions within the dual eligible population are occurring in the 21-64 age range, Iowa Medicaid is spending a relatively low amount on readmissions, $1,076,279.

**Utilization and Health Management of the Iowa Medicaid Dual Eligible Population**

Prior Authorization

While prior authorization of waiver services occurs for the 17,000 dual eligible members who are on waivers, prior authorization for some services for dual eligible members is waived. More information about prior authorization of waiver services is included in the Long Term Care section.

Prior authorization is not required for services that are covered by Medicare as Iowa Medicaid follows Medicare criteria for those procedures. Most durable medical equipment (DME) is covered by Medicare. Medicaid pays only the co-pay or deductible amount up to the Medicaid fee schedule. Other items which are not covered by Medicare, such as enteral products provided orally, may be covered by Medicaid and receive a medical necessity review from Medical Services. Other items or services that undergo medical necessity review include:

- Vision
- Audiology
- Dental
- Physician administered drugs
- Transplants
- Gastric procedures
- Surgeries (breast reduction or reconstruction, panniculectomy,

scar revision, heamgioma removal, septoplasty, rhinoplasty, blephoplasty)

While gastric procedure review for medical necessity is completed for all Medicaid members, if the procedure is denied by Medicaid but paid by Medicare for a dual eligible member, Medicaid will continue to pay any co-pay or deductible amount due.

When prior authorization of specific high tech radiology procedures was implemented in March 2010, logic was placed within MMIS to not require a prior authorization for crossover claims. Physicians were informed that they did not need to submit requests for dual eligible members. However, physicians may submit requests for review regardless of eligibility. If Medicare were to deny the claim leaving the member responsible to pay for the test, a prior authorization would be required for Medicaid payment.

## Retrospective Review

Retrospective review for medical necessity is completed through query of paid home health claims, hospital claims, claims that suspend for pre-pay review and Program Integrity algorithms. While Medicare may be the initial primary payer on home health claims for dual eligible members, Medicare criteria is much more limited and Medicaid generally pays a significant amount assuring the importance to the Medicaid program that medical necessity is confirmed.

Hospital claims for dual members, however, are excluded from the quarterly query completed by Medical Services. Analysis of hospital readmissions is covered in the Readmission section.

Most claims for duals, such as sterilizations, abortions, hysterectomies, ambulance, concurrent care, multiple surgery pricing, questionably cosmetic procedures, services requiring a prior authorization for which the system did not find an authorization are excluded for pre-pay review.

Retrospective review by Program Integrity does not eliminate dual eligible members. However, with there is a threshold of $200 that may not be met when a service is paid by Medicare and Medicaid is only responsible for the co-pay amount.

## Health Homes

Iowa Medicaid has embarked on its implementation of health homes for Medicaid members. An individual qualifies for health home services when the individual has the following:

- One serious and persistent mental health condition or,
- Two chronic conditions as defined below or,
- One chronic condition and is at risk for a second chronic condition

Chronic health conditions include the following categories:

- Substance use disorder
- Asthma
- Diabetes
- Heart disease
- Overweight, as evidenced by a BMI over 25 or greater than 85$^{th}$ percentile by age
- Hypertension

At risk is defined as documented family history of a verified heritable condition, a diagnosed medical condition with an established co-morbidity to a specific condition, or a verified environmental exposure to an agent or condition known to be causative of a specific diagnosis. An at-risk condition must be documented in the patient's medical record at the time the member is enrolled in the program.

Of the 93,255 individuals who have been determined by Milliman as being eligible for health home services, 17,738 (19 percent) are dual eligible members.

Member Services Care Management

Currently there are some dual eligibles in the Member Services Care Management program. Dual eligible members have been added to the Lock-in Program for Benzodiazepine overutilization. In the near future with the Affordable Care Act (ACA) Member Services will be looking at managing more duals. According to the Care Management team, these members are more complex than Medicaid only members, are more likely to have mental health needs, have increase emergency room use and hospitalizations and generally require long term care. They can comprise almost 40 percent of Medicaid spending even though they are only about 15 percent of the Medicaid population.

Primary Care Case Management (PCCM)

Iowa Medicaid's PCCM system assigns members from specific counties to physician care managers. Dual eligible members, however, are excluded from this process.

Iowa Plan

| Iowa Plan | Total Iowa Plan Population | % Change from Previous Year | Dual Eligible Population | % Change from Previous Year | Duals - % of Total Population |
|---|---|---|---|---|---|
| 7/1/2009 | 333,401 | *** | 32,559 | *** | 9.8% |
| 7/1/2010 | 386,754 | 16.0% | 60,603 | 86.10% | 15.7% |
| 7/1/2011 | 401,330 | 3.8% | 60,615 | negligible | 15.1% |

In FY2010, the Iowa Plan began providing mental health services and case management to persons age 65 and older. With the 86 percent increase in dual eligible members, the Iowa Plan experienced a 16 percent increase in membership overall.

## Dual Eligible Population and Long Term Care

Waiver Programs

Medicaid members become eligible for both Medicare and Medicaid when they are over the age of 64 and meet the poverty guidelines and when they are under the age of 64 and meet disability guidelines. Iowa Medicaid's 1915c waiver programs address special needs populations and include a large proportion of dual eligible members.

| Anchor Date | Waiver Population Excluding CMH | % Change from Previous Year | Dual Eligible Population | % Change from Previous Year | Duals - % of Waiver Population |
|---|---|---|---|---|---|
| 7/1/2008 | 24,291 | *** | 16,940 | *** | 69.7% |
| 7/1/2009 | 25,367 | 4.4% | 17,670 | 4.3% | 69.7% |
| 7/1/2010 | 25,363 | Negligible | 17,595 | 0.4% | 69.4% |
| 7/1/2011 | 24,992 | -1.5% | 17,057 | -3.1% | 68.2% |

Children's Mental Health (CMH) Waiver was excluded as there were no members identified as being dual eligible. Tables specific to each waiver with dual population follow.

| Anchor Date | Elderly Waiver Population | % Change from Previous Year | Dual Eligible Elderly Waiver Population | % Change from Previous Year | Duals - % of Elderly Waiver Population |
|---|---|---|---|---|---|
| 7/1/2008 | 9,787 | *** | 9,745 | *** | 99.6% |
| 7/1/2009 | 10,177 | 4.0% | 10,135 | 4.0% | 99.6% |
| 7/1/2010 | 9,968 | -2.1% | 9,933 | -2.0% | 99.6% |
| 7/1/2011 | 9,275 | -7.0% | 9,220 | -7.2% | 99.4% |

It's no surprise that membership of the Elderly Waiver is nearly entirely dually eligible. Case Managers through the Area Agencies for the Aging and other case management agencies provide the management of waiver renewals for the members and the management of waiver services for these members. Services that receive utilization management in the form of a prior authorization requirement include:

- Level of Care - Nursing Facility (NF) or Skilled Nursing Facility (SNF)
- Home and Vehicle Modifications
- Assistive Devices
- Consumer Directed Attendant Care (CDAC)

It is anticipated that Respite will also require prior authorization in the next fiscal year.

Elderly Waiver population appears to have decreased approximately five percent according to the benchmark dates of 7/1 while the proportion of dual eligible members has remained steady.

| Anchor Date | AIDs Waiver Population | % Change from Previous Year | Dual Eligible AIDs Waiver Population | % Change from Previous Year | Duals - % of AIDs Waiver Population |
|---|---|---|---|---|---|
| 7/1/2008 | 44 | *** | 35 | *** | 79.6% |
| 7/1/2009 | 49 | 11.4% | 39 | 11.4% | 79.6% |
| 7/1/2010 | 45 | -8.2% | 35 | -10.3% | 77.8% |
| 7/1/2011 | 41 | -8.9% | 36 | 2.9% | 87.8% |

The next highest proportion of dual eligible members is found in the AIDs Waiver, exceeding three-fourths of the waiver members. Case management of waiver renewals for the members and management of the waiver services for this waiver are provided by Targeted Case Managers. Members are approved for this level of care if they have a diagnosis of AIDs or HIV and meet Level of Care criteria. The only services that receive utilization management through prior authorization at this time are the following:

- Level of Care – NF or Hospital
- CDAC.

It is anticipated that Respite will also require prior authorization in the next fiscal year.

Although small in number, the AIDs waiver population has remained relatively stable while the proportion of dual eligible members increased ten percent from FY2010 to FY2011.

| Anchor Date | Physical Disability Waiver Population | % Change from Previous Year | Dual Eligible PD Waiver Population | % Change from Previous Year | Duals - % of PD Waiver Total Population |
|---|---|---|---|---|---|
| 7/1/2008 | 750 | *** | 396 | *** | 52.9% |
| 7/1/2009 | 859 | 14.5% | 447 | 12.9% | 52.0% |
| 7/1/2010 | 848 | -1.3% | 443 | -0.9% | 52.2% |
| 7/1/2011 | 877 | 3.4% | 440 | -0.7% | 50.2% |

The next highest proportion of dual eligible members is found in Physical Disability (PD) Waiver, slightly over one-half. Coordination of waiver renewals for the members and the waiver services for this waiver is provided by DHS Service Workers. Members are approved for this level of care if they meet nursing facility or Intermediate Care Facility for the Mentally Retarded (ICF/MR) level of care. The only services that receive utilization management through prior authorization at this time are the following:

- Level of care – NF, SNF, ICF/MR
- CDAC
- Home and vehicle modification

While the PD Waiver population has increased the proportion of dual eligible members has decreased slightly.

| Anchor Date | Intellectual Disability Waiver Population | % Change from Previous Year | Dual Eligible ID Waiver Population | % Change from Previous Year | Duals - % of ID Waiver Total Population |
|---|---|---|---|---|---|
| 7/1/2008 | 10,111 | *** | 5,145 | *** | 50.9% |
| 7/1/2009 | 10,499 | 3.8% | 5,338 | 3.8% | 50.8% |
| 7/1/2010 | 10,775 | 2.6% | 5,505 | 3.1% | 51.1% |
| 7/1/2011 | 11,050 | 2.6% | 5,678 | 3.1% | 51.4% |

Similar to the PD Waiver, the proportion of dual eligible members is found in the Intellectual Disability (ID) Waiver is slightly over one-half of the waiver members. Case management of waiver renewals for the members and management of the waiver services for this waiver are provided by Targeted Case Managers. Members are approved for this level of care if they have a diagnosis of mental retardation as described by the most recent version of the Diagnostic and Statistical Manual (DSM) and meet the ICF/MR criteria by having deficits in three of the fourteen identified life skills areas. The services that receive utilization management through prior authorization at this time are the following:

- Level of Care – ICF/MR
- CDAC
- Home and Vehicle Modification
- Prevocational Services

It is anticipated that Supported Community Living (SCL) for Children, Respite and Interim Medical Monitoring and Treatment (IMMT) will also require prior authorization in the next fiscal year.

The ID waiver population and the number of dual eligible members both have steadily increased approximately three percent each year with the proportion of dual eligible members slightly increasing.

| Anchor Date | Brain Injury Waiver Population | % Change from Previous Year | Dual Eligible BI Waiver Population | % Change from Previous Year | Duals - % of BI Waiver Population |
|---|---|---|---|---|---|
| 7/1/2008 | 1,123 | *** | 538 | *** | 47.9% |
| 7/1/2009 | 1,117 | -1.0% | 548 | 1.9% | 49.1% |
| 7/1/2010 | 1,142 | 2.2% | 578 | 5.5% | 50.6% |
| 7/1/2011 | 1,206 | 5.6% | 582 | 0.9% | 48.3% |

The next highest proportion of dual eligible members is found in the Brain Injury (BI) Waiver, slightly less than one-half of the waiver members. Case management of waiver renewals for the members and management of the waiver services for this waiver are provided by Case Managers and Targeted Case Managers. Members are approved for this level of care if they have a diagnosis of a traumatic brain injury and meet NF, SNF or ICF/MR level of care. The services that receive utilization management through prior authorization at this time are the following:

- Level of Care – NF, SNF or ICF/MR
- CDAC
- Home and Vehicle Modification
- Prevocational Services

It is anticipated that Supported Community Living for Children, Respite and Interim Medical Monitoring and Treatment (IMMT) will also require prior authorization in the next fiscal year.

The Brain Injury waiver population and the number of dual eligible members have remained stable. It should be noted that the BI Waiver is only available through age 64. If a member continues to meet level of care and need services from the waiver, the member is transitioned to the Elderly Waiver. Members are anticipated to transition in the next few years:

- 2012 – 13 members
- 2013 – 16 members
- 2014 – 16 members

| Anchor Date | Ill & Handicapped Waiver Population | % Change from Previous Year | Dual Eligible I&H Waiver Population | % Change from Previous Year | Duals - % of I&H Waiver Population |
|---|---|---|---|---|---|
| 7/1/2008 | 2,476 | *** | 1,081 | *** | 43.7% |
| 7/1/2009 | 2,666 | 7.7% | 1,163 | 7.6% | 43.6% |
| 7/1/2010 | 2,585 | -3.0% | 1,101 | -5.3% | 42.6% |
| 7/1/2011 | 2,543 | -1.6% | 1,101 | 0.0% | 46.3% |

The last waiver with dual eligible members is the Ill and Handicapped (I & H) Waiver which has a proportion of dual eligible members ranging from 42 to 46 percent. Case management of waiver renewals for the members and oversight of the waiver services for this waiver are provided by DHS Service Workers. Members are approved for this level of care if they meet NF, SNF or ICF/MR level of care. The only services that receive utilization management through prior authorization at this time are the following:

- Level of Care – NF, SNF, ICF/MR
- CDAC
- Home and Vehicle Modification

It is anticipated that Respite and Interim Medical Monitoring and Treatment (IMMT) will also require prior authorization in the next fiscal year.

There were no dual eligible members identified in the Children's Mental Health (CMH) Waiver.

Facilities

Many of Medicaid's dual eligible members reside in facilities. Nursing facilities in the table below includes Skilled Nursing Facilities, Intermediate Level of Care and Nursing Facilities for the Mentally Ill.

| Anchor Date | Total NF/SNF/NFMI Population | % Change from Previous Year | Dual NF/SNF/NFMI Eligible Population | % Change from Previous Year | Duals - % of NF/SNF/NFMI Population |
|---|---|---|---|---|---|
| 7/1/2008 | 12,776 | *** | 12,222 | *** | 95.7% |
| 7/1/2009 | 12,577 | -1.5% | 12,000 | -1.8% | 95.4% |
| 7/1/2010 | 12,366 | -1.7% | 11,797 | -2.30% | 95.4% |
| 7/1/2011 | 12,152 | -1.7% | 11,616 | -2.60% | 95.6% |

The dual eligibles within nursing facilities are decreasing at a slightly faster rate than the overall Medicaid population. The proportion of dual eligible members within nursing facilities has decreased.

| Anchor Date | Total ICF/MR Population | % Change from Previous Year | Dual Eligible ICF/MR Population | % Change from Previous Year | Duals - % of ICF/MR Population |
|---|---|---|---|---|---|
| 7/1/2008 | 1,966 | *** | 1,194 | *** | 60.7% |
| 7/1/2009 | 1,942 | -1.2% | 1,183 | 0.9% | 60.9% |
| 7/1/2010 | 1,921 | -1.1% | 1,170 | -1.20% | 60.9% |
| 7/1/2011 | 1,887 | -1.8% | 1,162 | -0.80% | 61.6% |

While the population in ICF/MR facilities is slightly decreasing, dual eligible members maintain a steady proportion and comprise 61 percent of the population of ICF/MR facilities.

Similar to the CMH Waiver population, there are few children in PMIC who are dual eligible, approximately one percent.

| Anchor Date | Total RCF Population | % Change from Previous Year | Dual Eligible RCF Population | % Change from Previous Year | Duals - % of RCF Population |
|---|---|---|---|---|---|
| 7/1/2008 | 1,866 | *** | 1,360 | *** | 72.9% |
| 7/1/2009 | 1,680 | -10.0% | 1,224 | -10.0% | 72.9% |
| 7/1/2010 | 1.674 | Negligible | 1,224 | 0.0% | 73.1% |
| 7/1/2011 | 1,624 | -3.0% | 1,166 | -4.7% | 71.8% |

Residential Care Facilities are considered to be members' homes and community placements and are not considered to be institutional care. While the population in

RCFs is decreasing, the proportion of dual eligible members has remained stable. Dual eligible members continue to comprise more than two-thirds of the RCF residents.

## Program for All Inclusive Care for the Elderly (PACE)

Program for All Inclusive Care for the Elderly (PACE) began in Iowa in September 2008. The PACE program is designed to allow members aged 55 and older to stay healthy and live in the community as long as possible. PACE members must live in the community and meet NF Level of Care to qualify for the program. PACE provides a full battery of services including:

- Outpatient clinical care
- Day center
- Therapies – physical, recreational, occupational
- Dietician and social worker
- Meals at home or at day center
- Personal care and home health aid
- Homemaker, laundry at day center
- Transportation
- Medical equipment

As of this writing there are two PACE providers in Iowa. To receive services, the member must reside in one of the following counties:

- Woodbury
- Monona
- Ida
- Sioux
- Plymouth
- Cherokee
- Pottawattamie
- Mills
- Harrison

Another PACE program is opening in central Iowa and is anticipated to begin serving members early in 2013. Counties covered will include:

- Polk
- Warren
- Madison
- Marion
- Jasper
- Marshall
- Story
- Boone
- Dallas

PACE is the only tested model of managed care for elder Medicaid members.[9]
Below describes the population of Medicaid members enrolled in PACE as of 3/1/2012.

| Total PACE Population 3/3/2012 | Dual Eligible PACE Population | Dual Eligible % of PACE Population | Non-Dual Eligible PACE Population | Non-Dual Eligible % of PACE Population |
|---|---|---|---|---|
| 165 | 142 | 86.1% | 23 | 13.9% |

The proportion of dual eligible membership in PACE is higher than in waivers, 86 percent in PACE compared to 68 percent in waivers.

| Age Range | Dual Eligible Population | % of Dual Population |
|---|---|---|
| 55-64 | 63 | 44.3% |
| 65 and over | 79 | 55.6% |

Slightly less than half of the PACE dual members are younger than age 65. All of the non-dual eligible PACE members are younger than age 65.

Oversight of PACE includes conducting satisfaction surveys of Iowa's Siouxland PACE. Results from the past two years are as follows:

| Year | Overall Staff Satisfaction | PACE Participant Satisfaction |
|---|---|---|
| 2010 | 90% | 92% |
| 2011 | 81% | 78% |

While satisfaction results decreased in the second year, scores remain within a desired threshold. Any standard that did not meet a threshold of 70% must be included in an improvement plan for the following year.

### Other States' Efforts at Managing the Dual Eligible Population

The Sixth National Medicaid Congress focused on the dual eligible population. Mathematica Policy Research, Inc. reported on a study of state plans to manage dual eligible members[10] Mathematica completed an extensive review of the management of the dual eligible population in 2006-2007. Data supporting 15 percent dual membership of total Medicaid and 40 percent of Medicaid costs is completely in line with Iowa Medicaid's 2011 data. Age of Iowa's dual population, however, significantly differs in that only 43 percent are over the age of 65 compared with 67 percent in the Mathematica study. Mathematica found that 77 percent of Medicaid spending on duals is for Long Term Care. In Iowa in FY2011, 73 percent of dual spending occurred on Long Term Care and waiver claims.

Medicare Advantage (MA) and Special Needs Plans (SNPs) began operating in 2006 to improve coordination and management of the dual eligible population. Mathematic reviewed SNPs in the following states:

- Arizona
- Maryland
- Massachusetts
- Minnesota
- New Mexico
- North Carolina
- Oklahoma
- Vermont
- Virginia

Mathematica found that overall, SNPs are consolidating and enrollment growth is flattening. While SNP plans are paid in the same way other Medicare Advantage plans are paid, they have more care management and performance reporting requirements. SNP for dual members may be eligible for a special "frailty adjustment" to rates similar to the PACE "frailty adjustment".

The PACE frailty adjustment model is a Medicare payment approach that adjusts payments to a Medicare managed care organization to the functional impairment of its enrollees similar to the case mix methodology that guides nursing facility payments. Frailty adjustments could extend to more dual eligible managed care organizations.[11] This payment factor helps programs be more viable for frail elderly and increase access. Frailty adjustments are not currently part of Iowa's PACE program. If implemented, they could be used to promote keeping members in their homes.

Major findings of the study state attempts and managing dual eligibles were as follows:

- Strong political and organizational leadership is crucial to success to secure continued buy-in from stakeholders.
- Enrollment was a challenge due to lack of awareness, limited resources and Medicare's requirement of voluntary managed care enrollment.
- States are reluctant to invest in programs that secure most immediate savings for Medicare as savings in long term care programs benefitting Medicaid require much more care management.
- Program structure challenges include questions of private managed care versus state managed care, separate programs for over and under age 65 and how to incorporate long term care and behavioral health services.
- Conflicting Medicaid and Medicare rules and requirements hinder program development.

While most states, including Iowa, have managed care programs, most have excluded dual eligibles from these programs. Iowa has also excluded dual eligibles from MediPASS and, historically, from its disease and care management programs. Iowa's managed care program for behavioral health began including members over age 65 July 1, 2010. While Medicare introduced MA SNPs in 2003, 80 percent of dual eligibles have remained within the unmanaged fee-for-service population. Those who do participate are not fully managed as most SNPs do not managed long term care services.

Three states had well-established programs: Arizona, Massachusetts and Minnesota. Massachusetts' program has included only persons older than 65 but is in the process of developing a program for duals who are under age 65 and are disabled. All three states have struggled with enrollment due to lack of a mandatory requirement. Minnesota also decided to disband its program for the under 65 disabled duals due to high costs and long term care benefits were provided through fee-for-service. Other state experiences are as follows:

- New Mexico began a program in 2008 for management of long term care benefits in response to rapid growth of personal care costs. Enrollment is mandatory for dual members meeting nursing facility level of care.
- Maryland was unsuccessful in launching a program to manage dual eligibles due to conflict with CMS on the type of waiver authority.
- Virginia was also not successful due to opposition from nursing facility and other providers not supporting managed care.

States have found that capitated approaches are not likely to be feasible for all states. Considerations of financing arrangements to improve the return on investment of Medicaid states have included:

- Contracting with entities who also have contracts with Medicare
- Relying on the state to serve as the managed care entity.

North Carolina, Vermont and Massachusetts are considering assuming the functions of a traditional MCO.

Minnesota's experience highlights the various concerns in meeting the diverse needs of duals. They found that the older than 65 group wanted more hands-on medical care management while the under 65 group wanted more freedom with assistance in accessing non-medical and social services. The disabled community did not want to be included in a program for seniors.

Key components of the managed care programs have included:

- Initial assessment
- Information systems facilitating coordination
- Physician-based medical homes

Minnesota, Arizona and Massachusetts included long term care in their plans. Keys to success have included ensuring that the fees are adequate to cover nursing facility costs and to have pre-established performance measures for meeting or exceeding community service percentage. This has led to a shift over time from nursing facility to community service use.

Other key ideas from the state study:

- Emphasize transition planning into and out of hospitals
- Reward nursing facilities with low hospitalization rates
- Include extensive performance and quality monitoring components
- Implement passive enrollment with option to refuse
- Plan and build consensus over a multi-year period of time prior to implementation

Also at the Sixth National Medicaid Congress, CMS reported on Innovation Center grants awarded to 15 states to design new models for serving dual eligible members.

Areas of focus for initiatives to improve access, coordination and cost of care for dual eligible members are in the following areas:

- Program Alignment
- Data and Analytics
- Models and Demonstrations

While Iowa data appears to reflect less concern with hospital readmissions, benefits can be achieved from improving care coordination, attending to health literacy concerns, and increasing access and oversight of medical and behavioral care.

**Summary**

Due to the length of this study, section summations are listed below.

Demographics

Iowa Medicaid's dual eligible population has been fairly stable in size over the past three years. There are approximately 20 percent more women than men. The relative age of the dual population is becoming younger.

Inpatient Quality Indicators

Iowa's population exceeded national benchmarks in 12 of 16 measures. Of particular concern were measures relating to acute conditions of dehydration, bacterial pneumonia and urinary tract infection. Iowa Medicaid dual eligible members could likely benefit from health management to improve timely identification and response to symptoms and thereby, decrease unnecessary hospitalizations.

Utilization and Health Management

Since many medical procedures for dual eligible members do not require prior authorization or undergo retrospective review there is little utilization management in place. Waiver prior authorization and the PACE managed care program serve as the primary tools of Iowa Medicaid in managing the dual eligible population.

No preventable readmissions should occur and members can always benefit from better quality outpatient care, especially addressing appropriate transitions of care and health literacy factors. At this time, Iowa does not appear to have a rate of readmission that requires additional attention.

MDC Analysis

While the dual eligible July 1 census increased by only 0.5 percent from 2009 to 2011 and the dual eligible members with at least one paid claim decreased by 5.0 percent from 2009 to 2011. Costs for the dual eligible members in the same time period

increased 10.4 percent. Waiver claims for dual eligible members have unnecessary omission of diagnoses on CMS 1500 claims. Much of the care of dual eligible members is not able to be associated with specific diagnoses as Waiver claims frequently have invalid diagnoses.

Long Term Care

Dual eligible members make up a large portion of the waiver population, from 99.6 percent on the Elderly waiver to 46.3 percent on the Ill and Handicapped Waiver. While there are case managers and services workers overseeing the renewal of level of care and the implementation of waiver services, there is little in place to ensure appropriate medical management of these members. The reach of waiver service prior authorization is expected to increase in the next fiscal year, however, that program is focused on ensuring the service selected by the case manager/service worker is medically necessary, not focused on ensuring that the member receives all needed services and is receiving appropriate medical care. Iowa's efforts to effectively manage the dual eligible population are increasing with the additional of PACE providers.

Successful Initiatives

PACE is one of the few tested models of integrated care for dual eligibles. Iowa is in the process of expanding access to PACE programs. Arizona, Minnesota and Massachusetts have successful care management programs for dual members. Lessons learned from other states such as leadership and consensus, financing arrangements, enrollment practices and design strategies can be helpful to Iowa. States have struggled with the cost of implementing care management for dual members and the initial cost savings are more applicable to Medicare expenditures. Iowa's plan for implementation of Medical Homes for dual members is in line with best practices implemented in other states that have begun to manage this population.

**On the Horizon:**

Medicare Cost Savings

Grant writing is underway to submit to the Centers for Medicare and Medicaid Services (CMS) for a shared cost savings initiative relating to the dual eligible population. If granted, Iowa Medicaid will benefit from the cost savings afforded to Medicare based on Iowa Medicaid initiatives. Services such as disease management, lock-in, medical home, etc., which are likely to yield cost savings for Medicare through care coordination and management will translate into dollars returned to Iowa.

Balancing Incentives Payment Program (BIPP)

The Medicare-Medicaid financial alignment proposal is in the process of being submitted. This proposal, if awarded, would provide additional funding via the federal

match of dollars to Iowa Medicaid to support the Balancing Incentives Payment Program (BIPP).

"Iowa is committed to implementing a Balancing Incentives Payment Program (BIPP) to improve care and rebalance Long Term Supports and Services (LTSS) received in a home and community based setting (HCBS). Iowa is developing a No Wrong Door/Single Entry Point (NWD/SEP) system that establishes needed infrastructure to identify members in need and train local health home providers agencies. As part of the BIPP requirements, Iowa will train the workforce on community long term care options. Transitioning case management to Health Home providers supports the BIPP requirement of conflict free case management. By Implementing needed tools and infrastructure, the health home can now provide continuity in case management during transitions for LTSS that is currently lacking in our system today. This continuum of care both decreases potentially avoidable admissions and is more likely to provide the correct level of care for the members in a managed FFS model." (Financial Alignment Demonstration Proposal for Medicare-Medicaid Members, April 2012).

This program supports Iowa's efforts towards complying with the Olmstead Act and allowing members who have a desire to reside in the community setting the ability to do so with the needed supports.

**Recommendations:**

- Refocus case management entities on the needs of dual eligible members, particularly coordination of medical and behavioral care.
- Continue to support expansion of the PACE program.
- Follow lessons learned from Arizona, Minnesota and Massachusetts in implementing care management programs for dual members.
- Consider the state taking the role of MCO in managing dual members.
- Design separate programs for seniors and disabled dual eligible members.
- Continue to support BIPP initiatives.
- Require all professional waiver providers to include a diagnosis.
- Continue to expand prior authorization of waiver services
- Complete MVM study on conflict free case management in support of the BIPP initiative to benefit dual eligible members.
- Complete additional MVM study of the medical outcomes of dual eligible waiver members or outcomes of non-waiver members.
- Complete additional MVM study comparing medical outcomes of the PACE program to outcomes of non-enrollees.
- Implement edits to not pay co-pays for denied gastric procedures.
- Require prior authorization of DME for dual members and do not pay co-pays for denied procedures.
- Require prior authorization of radiology for dual members and do not pay co-pays for denied procedures.

- Require providers using CMS 1500 claims for waiver services to enter a valid diagnosis.
- Populate non-professional claims (Meals on Wheels, Transportation, etc.) with diagnosis from ISIS.

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